Mavis Beacon Teaches Typing!

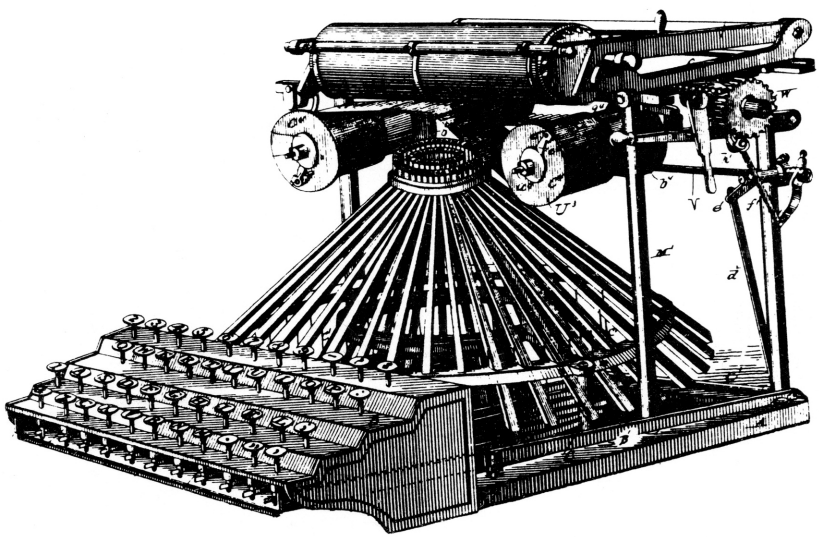

Table Of Contents

1. **About Mavis Beacon** 2
   (Introducing the many features of the program.)
2. **A History of Typewriting** 5
   (Probably much more than you ever wanted to know about the fascinating people and machinery that pioneered the amazing hardware and software you'll now be using. Read it. It's fun!)
3. **Typing Fundamentals** 21
   (A few pointers before you begin your work with Mavis.)
4. **Keyboard Basics** 24
   (A quick look at the keyboard. If you already know a little about typing, you may want to skip this section.)
5. **Typing Business Letters** 26
   (Some uses of the skills you'll learn with Mavis.)
6. **The Resume Writer** 34
   (Here's help in marketing your abilities.)
7. **The Theory Behind Mavis** 37
   (Our programmers are bursting with righteous pride over Mavis. They asked to tell you why. So here, in their own words, is how Mavis "thinks.")
8. **The Speed-Typing Alternative** 40
   (The story behind the only successful alternative to the standard "QWERTY" keyboard, and perhaps the way of the future.)
9. **For Practice** 44
   (Some "real world" practice texts—part of your curriculum with Mavis.)
10. **Typing Errors** 56
    (An explanation of nineteen specific error categories used by Mavis Beacon to analyze your typing progress.)
11. **Bibliography** 59

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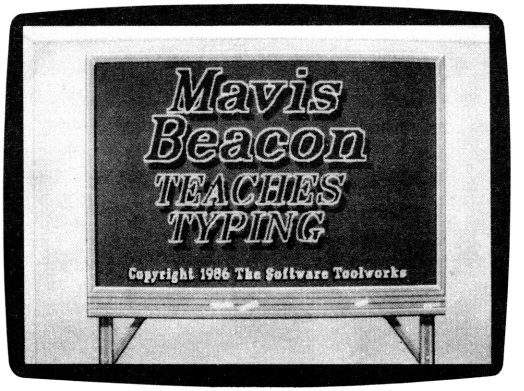
"There came a moment when I realized that I was typing —without thinking that I was typing! From that instant on, my creativity soared like a condor, unchained from the burden of scratching, parrot-like, upon my papers."

Pablo Crane

About Mavis Beacon

Learning to type with "Mavis Beacon Teaches Typing" is like having the world's most attentive and patient typing teacher constantly at your side. She'll be with you every step of the way, helping you through any difficulties you may have, as well as rewarding your many triumphs. She'll guide you carefully through every step of your learning process, creating lessons and drills tailored specifically to your individual needs.

Like any good teacher, Mavis understands that you don't learn best in the same classroom day after day. So, she has four learning centers in which you'll work. As you go through the program, you'll become familiar with them all. But for now, let's take a brief look at each one:



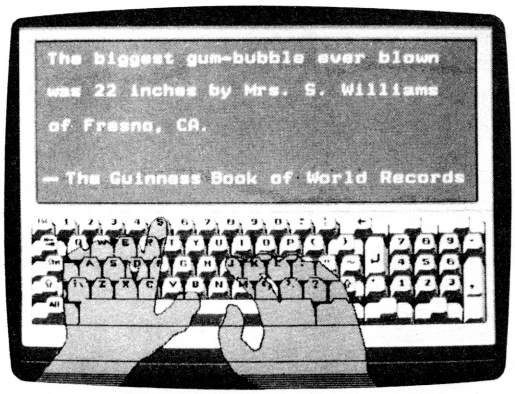
The Chalkboard

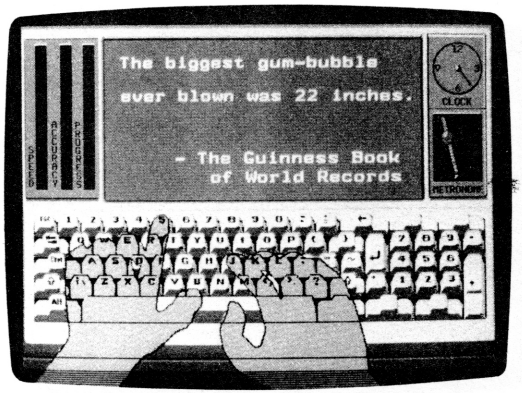
Before each lesson, Mavis details her teaching plan for you on the big chalkboard at the front of the classroom.

Each lesson you work on with Mavis addresses a particular typing problem (such as poor speed or dropped characters). You will see the problem Mavis has chosen to work on at the top of the chalkboard. Underneath that, Mavis writes her "remedy": the method that she has selected to help you improve. A longer explanation of her recommendation appears in the middle of the chalkboard (unless you have asked Mavis to provide only terse explanations of her remedies). Finally, each lesson focuses on different kinds of text to keep things interesting; you may find yourself reading the story of Daphne's camel, chuckling over a joke or riddle, or working with words containing your "problem" characters.

Whenever the chalkboard appears with a suggestion from Mavis, you always have the choice of accepting her sage advice, or choosing an alternative. You may ask for another suggestion, create your own lesson plan, or spend some time simply typing on your own without Mavis looking over your shoulder.

If you accept Mavis' suggestion, you will find yourself in the Classroom, the Workshop, or at the Arcade. These are the places where you actually practice your typing under Mavis' watchful eye.





The Classroom

The first time you work with Mavis you will be in the "classroom." You'll notice that it looks like the computer on which you are typing, complete with monitor and keyboard. When you begin a lesson on our IBM, Atari ST, Apple IIGS, Amiga and Macintosh versions, you'll see a pair of "guide" hands poised above the keyboard, ready to type. As you begin to type, so will the "guide" hands. These are your instructors for correct hand placement and finger reach. Don't look down at your hands as you go; look up at the screen. It may seem difficult at first, but by keeping your eyes forward and watching the screen, you'll quickly learn how to type each key perfectly.

On our Commodore 64, Atari 8-bit and Apple II versions, you must select the "Keys and Fingers" option* in order to let the "guide" hands teach you proper fingering and hand position. You may select this feature for help on a single key or a "tour" of the entire keyboard.

As you type a lesson, the keys you press will also guide you to correct technique. Each key you strike will depress a little or the keytop will light up. Remember, try to look at the monitor as you go, not down at your hands! Let the on-screen keys help you increase your speed and accuracy.

The Workshop

The "workshop" is another area in which you and Mavis will work. Again, you'll see the "guide" hands on the 16-bit versions and the "Lights and Keytops On" in our 8-bit versions, waiting to type with you. You will also see a clock, metronome and three meters alongside your screen. These features are other ways Mavis will help you increase your typing speed and accuracy.

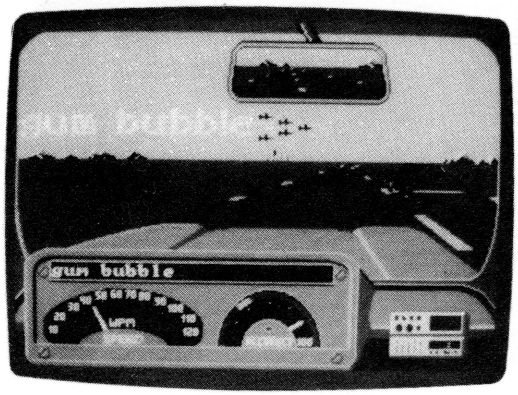
You can time your lesson with the clock or choose to work without it. The metronome is there to help you type in rhythm. Or, type to the beat of a ragtime classic!

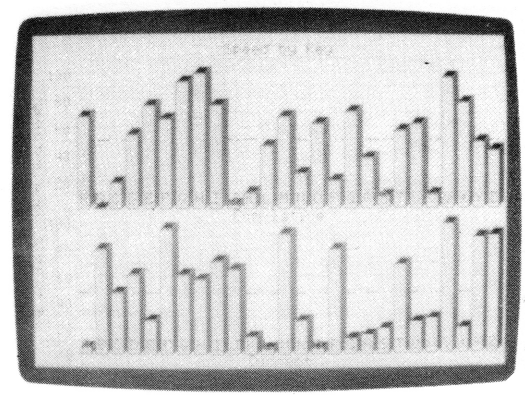
Studies have shown that use of a steady beat helps new typists increase their typing speed. Many of us, when first learning to type, tend to pause before more difficult finger reaches, causing our fingers to falter and stumble. Rhythm helps us break through these "typing walls" and work faster! You can set the metronome to "tick" in time or move silently.

Three constantly updated meters monitor your speed and accuracy and tell you how much of the lesson you've completed.

Before each lesson, Mavis will choose the features she thinks you should use for that lesson. You are, however, always free to manually select the ones you prefer.

*See the instructions for your version of Mavis, included separately, for the way to select each option.





The Arcade

Mavis might decide it's time for a special challenge, so get ready! You'll find yourself in the cockpit of a High Performance Road Racer, typing your way to glory! The graphics here will make you feel like you're at the video arcade.

You'll find yourself pitted against "Red Walter" who'd like nothing better than to leave you in the dust. Jet fighter planes blast your typing drill across the sky. Typing well, you leap forward and your opponent fades into your rear view mirror. You make mistakes, and "Red Walter" starts to creep up on you. Typing like crazy, you pull ahead and... WIN!!!

Progress Charts

Mavis monitors your growth constantly. At any time you can view any one of nineteen graphs. They display your up-to-the-second progress in every imaginable typing category. As shown here, Mavis not only tells you how you're doing this lesson, but also how you've done since Day One. At any moment during any exercise you can stop to check your typing skill. Resume the lesson whenever you like.

Help and Features

Whether you are a beginner or an expert, Mavis will always have appropriate advice on hand. She is always glad to explain how her program works. All you need do is ask. A stroke of the 'Help Key' will provide help based upon precisely where you are in the program. Should her first explanation not answer your question exactly, you may then choose from any item in the complete list of Mavis' help topics. And when you're finished, simply return to your lesson!

You may never need to call on Mavis' complete list of help features, but if you do, they are only a keystroke away.

Customized Features

Like all fine teachers, Mavis will get to know you. She will discover your individual needs and concerns. But until she gets to know your work style, Mavis will choose the settings and classrooms. You can, however, change them to your liking.

On our 16-bit versions, your "guide" hands can be turned off, should you just want to use the lettered keytops that light up when you press them. Or perhaps you'd really like to challenge yourself with no hands and no keytops! This ultimate test is also available on our 8-bit versions. You might find that you type better with the metronome or without it. Go ahead and switch. And switch back. Find out how you work best.

We all forget, especially when we're just learning. If you forget where a certain key is or which finger types it, just call for "Keys and Fingers." It will tell you what key you just hit and what finger you should be using. With "Keys and Fingers," you can learn about one key or the entire keyboard, then return to your lesson after you're done.

Mavis also lets you type on the Dvorak keyboard (see Section 8). If you'd like to try this alternative keyboard, go ahead. Or if you'd like to learn the Dvorak method, simply select that option. From then on, Mavis' on-screen keyboard, as well as yours, will conform to the Dvorak arrangement.

With Mavis, her powerful graphics, and always insightful instruction, you've got everything going for you. You'll learn to type fast and accurately in less time than you ever dreamed possible. And you'll have fun while you're doing it!

The History of Typewriting

Imagine it's 1828. The lamp wick sputters, and flickering images dance on the papers before you. Rubbing your cramped hand, you contemplate the twelfth letter of the evening. It's been three hours. The pen nib is getting worn, and the ink in the inkwell is beginning to clot. You continue, because the letters must be written. But, oh, what you wouldn't give for someone to do your correspondence for you. Or something...

This was the situation for most everyone at the beginning of the nineteenth century. That is, until William Austin Burt, an inveterate tinkerer, came along. Tired of cramped hands and ink-stained pages, he created the first workable typewriter. It was a crude, wooden prototype, but it pointed toward a revolution in written communications, business organization and education.

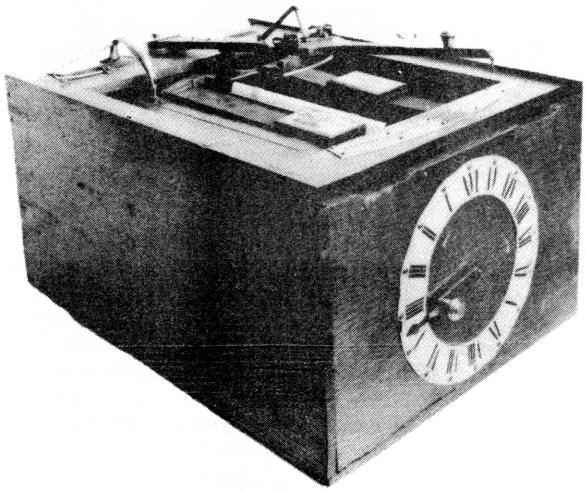
Amazingly, William Burt was unaware of the potential held by his latest invention. He was a quiet man whose only real love was the sea. To him, the writing machine was an interesting novelty, but he considered it far less useful than his automatic page turner. This boyhood invention was designed to let him read the sea stories he loved while making the roof shingles his father ordered. In fact, Burt might even have tossed his "typographer" aside had it not been for the vision of his friend, John P. Sheldon.

Sheldon saw dollar signs on every key.

On May 25, 1829, Sheldon, the founder and editor of the Michigan Gazette (which later became the Detroit Free Press) wrote a letter to President Andrew Jackson. Sheldon wrote praising the invention of young Burt:

> Sir:
>
> This is a specimen of the printing done by me on Mr. Burt's typographer. You will observe some inaccuracies in the situation of the letters; these are owing to the imperfections of the machine, it having been made in the woods of Michigan where no proper tools could be obtained by the inventor...I am satisfied...that the rough machine (the typographer), with which I am now printing, will be ranked with the most novel, useful and pleasing inventions of this age.

Burt's typographer was a heavy, boxlike contraption, made almost entirely of wood. Like today's familiar toy typewriter, the typographer had type mounted on a metal wheel, a rotating, semicircular frame. By turning a crank, Burt was able to move the wheel until it came to the letter he wanted. Then he would pull a lever, driving the type against the paper and making an inked impression.



Replica of Burt's Typographer

The print was neat and legible, and with practice, Burt was able to increase his speed. There was only one drawback to all this. No matter how much he practiced, Burt was never able to make his machine type any faster than he could write with a pen.

That didn't stop Sheldon, a natural promoter, from seeing great things for the machine. He quickly got an exclusive patent for it in Burt's name. Burt, however, wanted nothing more than to take care of his personal and political duties. As the father of three active boys and a member of the Michigan Territorial Legislative Council, he had his hands full. Nevertheless, he now also found himself with the full and exclusive right "to make and vend to others his typographer." With Sheldon's encouragement, Burt started improving the machine for commercial release.

After about six months, he was able to unveil a new model. It had grown to the size and shape of a pinball machine. But the average pinball machine earns more in quarters in one day than Burt and Sheldon did during their entire venture. The public just wasn't buying. No one understood this crazy-looking contraption, much less the benefits of owning one. And, as far as how to operate it, everyone was lost. Burt and Sheldon were selling an improved typographer all right, but they didn't tell people how to use it. Or why anyone should learn. A torn page of a diary believed to be that of John P. Sheldon describes a never-implemented sales pitch:

> "...If we might explain in detail that...by keystroking each letter in any particular word, leaving space between this and following words...and with some hours' practice of such daily, any person will soon enable himself to imprint over 35 words per every minute...Such would increase business productivity..."

This is believed to be the first written piece of typewriting instruction.

But selling the machine came first. How to use it would come later. Whatever the case, they hit the trail hard. They felt sure that someone would recognize the potential of the typographer, instructions included or not. In a letter to his wife, Burt outlined his plans:

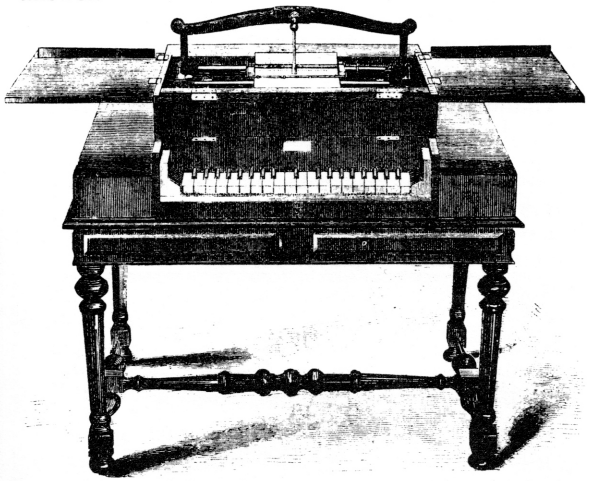
> My Dear Companion—
>
> This is the first specimen I send you except a few lines I printed to regulate the machine...Next week I shall put my machine on sale and shall sell out the patent as soon as I can and return home.

Unfortunately, Burt and Sheldon never found a buyer for their invention. They simply couldn't interest anyone in buying their patent. Burt finally returned home to the quiet life and his stories of the sea.

John Sheldon and William Burt may have failed to sell their early typewriter, but the idea certainly didn't die. People still had to grapple with the cumbersome, frustrating task of handwriting all correspondence. In 1853, expert penmen set the Handwriting Speed Record at only 30 words per minute. And most people were hardly expert. With the advent of F.B. Morse's electric telegraph, things

only got worse. Shorthand stenographers were in the same boat. Not only was speed a problem, but readability was getting thrown out the window.

Some form of personal writing machine, whatever its name or physical make-up, seemed the only answer.



"Some typewriters were as difficult to play as a baby grand."

So, it's no surprise that the three decades after Burt's typographer were rife with typewriters—or at least machines that attempted typewriting. Some of these printed by lifting twenty pounds of machinery while the paper remained still. Others looked more like home permanent wave machines than typewriters. An interesting French example contained seventy type bars and was as difficult to play as a baby grand. Still other whimsical attempts resembled accordions or kitchen clocks.

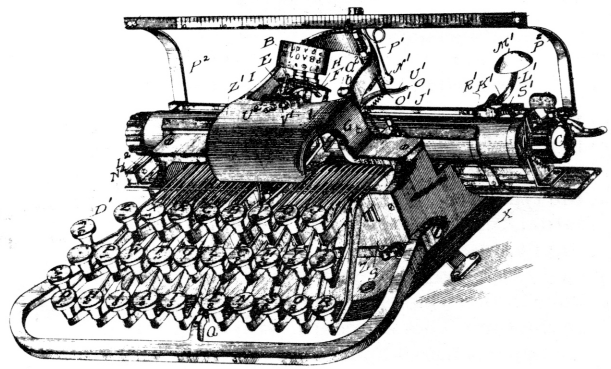
There is one significant example among all these attempts. It was a typewriter invented by two Englishmen, Alexander Bain and Thomas Wright. Bain and Wright put their heads together to solve the problem telegraph writers were having transcribing code as fast as it came off the wire.

What remains notable about their achievement is not that it solved the problem or worked with any noticeable ease, but that it introduced several ideas that advanced typewriter design. In Bain's and Wright's machine, a cylindrical roller, or platen, rotated and advanced the paper every time the typist reached the end of a line. It was a simple, yet revolutionary, idea to let the paper move while the machine remained stationary.

While these designs indeed contained elements of our modern typing machines, they were, as a group, fairly slow and clumsy. None saw its way past the experimental stage.

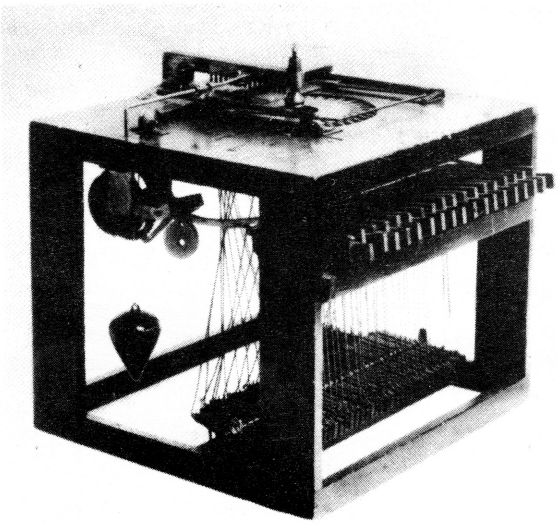
Except for the invention of the 52nd man to attempt the feat, Christopher Lathan Sholes.

His nightly tinkering with a duo of inventor-friends, Carlos Glidden and S.W. Soule, led to the creation of a machine they called the "Type-Writer" in 1872. This machine was a workable, if somewhat bizarre-looking rendition of what we think of as a typewriting machine. It's interesting, though, that the first machine finally produced was one geared to slow the typist down.



The First Portable Typewriter, 1891.

Sholes believed his machine was designed for convenience, but it had tremendous trouble with the keys jamming if they were hit too closely in succession. The primitive manufacture simply didn't allow each key hit to return to its mooring in time to make way for the next key chosen. Nothing Sholes or his friends did could eliminate the problem. Finally, in desperation, Sholes took a step that had a profound effect upon *you* as a typist. Since he couldn't redesign the machine to work faster,



The Sholes, Glidden and Soule Typewriter, 1868.

Sholes redesigned the keyboard to force the typist to type slower. He perfected what is known as the "QWERTY" keyboard (after the first six letters of the typewriter's third row). After much experimentation, Sholes produced an arrangement of keys so inconvenient, so annoying and troublesome, that it could slow even the most expert typist. But what helped solve Sholes' problem has left the rest of us in the soup. This keyboard, with a few minor changes, is used almost universally by English-typing people today!

Sholes shared a common bond with other early typewriter inventors. Few of these men gave a second's thought to how to type on their contraptions. Sholes assumed two, or at the outside four, fingers were sufficient to operate his Type-Writer. He among others, firmly believed that the third and fourth fingers of each hand were too weak to use. And Sholes assigned no specific keys to each finger. Exactly how to strike the keys was left to each typist's particular "style" and everyone looked at the keyboard while typing.

In fact, no real textbook was even written for typewriting technique until 1880. Composed by Edward F. Underhill, the *Handbook of Instruction for the Type-Writer* was a thin 16 pages and opened left to right for "easier use at the typewriter." Few people opened it. Like Sholes, the public in general didn't want a set typewriting formula. The freestyle "hunt and peck" technique was considered the best way for everyone to create his own typing method.

That didn't stop the "hunt and peck" style from being the brunt of several jokes. Soon it came to be known as the "Columbus" or "Discovery" method. Sometimes it was even referred to as the "Biblical" ("Seek and ye shall find") approach. And though it may sound silly today, this two-finger method remained unchallenged for decades.

But that didn't concern Sholes. His tragedy was that he lost every chance he had to capitalize on his invention. Shortsightedly, he sold the rights to his design to a seedy, bombastic, smooth-talker by the name of James Densmore.

Densmore and his partner, suave, baby-faced George Washington Yost, wholeheartedly believed in the Type-Writer. Especially when they dreamed of the fortune they felt they could make from it. They tried to sell everyone, from the United States government on down. Finally, Philo Remington, president of his family's gun manufacturing company, listened. A contract was signed. One thousand Type-Writers were to be manufactured. Yost and Densmore were to sell the machines bearing the Remington name. Wonderful news for our money-hungry duo. Except that the Remington Type-Writer ended up looking a lot like a sewing machine.

Philo Remington believed in "Art-in-Work." And when he searched for an artist-mechanic to refine the Type-Writer for mass production, he hired the best he could find: William K. Jenne. Jenne had a spotless career in mechanics and Philo considered Remington lucky to get him. Jenne was a dedicated man, proud of his expertise. However, Jenne's expertise was in the production of sewing machines.

Nonetheless, Jenne dived right in.

The Remington Type-Writer ended up with a distinctive dressmaker design, complete with a foot pedal to advance the paper and sweet little flowers on the side.

Densmore and Yost may have pushed the design and manufacture of the Type-Writer along, but someone else ended up doing more to spread the word than the two of them put together.

Mark Twain.

By the late 1870's, the Type-Writer was on the market, spotless and gleaming. But no one was buying. Not only did the machines cost an arm and a leg ($125.00, somewhat like buying an automobile today), but the concept of typewriting was still very new. Little or no advertising had been done.

"Pretty, perky girl"

At the point when it looked like typewriter sales would dwindle into non-existence, the machine (and Remington) got a lucky break. One sunny afternoon, Mark Twain, already a famous newspaper columnist and writer, fell in love with the Type-Writer. As part of its in-store sales pitch, a Boston department store hired the "prettiest and perkiest girl" it could find to demonstrate how the Type-Writer worked. Each day she sat in a special corner of the store and typed out samples on small slips of paper to hand out to customers.

A hungry salesman, eyeing Twain's interest, announced that the typist could type at the unheard of speed of fifty-seven words a minute. "Impossible," said Twain. The salesman insisted and had the typist work while Twain timed her on his stop watch. Again and again, he timed. All afternoon she typed. When she finally typed faster than fifty-seven words a minute, Twain bet the salesman she couldn't do it again. Twain lost, but he ended the day one typewriter richer. Of course, his glee was somewhat diminished later that day when he noticed the details of the department store gimmick. In his autobiography, Twain explains what happened when he and a friend later returned to their hotel rooms:

> "We got out our slips and were a little disappointed to find that they all contained the same words. The girl had economized time and labor by memorizing a formula which she knew by heart.
>
> At home I played with the toy, repeating and repeating "The boy stood on the burning deck" until I could turn out that boy's adventure at the rate of twelve words a minute; then I resumed the pen for business, and only worked the machine to astonish inquisitive visitors. They carried off reams of the boy and his burning deck."

Actually, Twain used the machine a great deal more than he let on. He composed the manuscript of *Tom Sawyer* on it, and even invented the standard, double-spaced, one-side-of-the-page-only manuscript that editors still expect today. When asked by the Remington Company, he contributed his personal testimonial to their sales catalog. It is typical, backhanded Twain:

> Gentlemen: Please do not use my name in any way. Please do not even divulge the fact that I own a machine. I have entirely stopped using the Type-Writer, for the reason that I never could write a letter with it to anybody without receiving a request by return mail that I would not only describe the machine but state what progress I had made in the use of it, etc., etc. I don't like to write letters, and so I don't want people to know that I own this curiosity breeding little joker.
>
> Yours truly,
> Saml L. Clemens

The first commercial typewriter—the Model 1, Remington that caught Mark Twain's eye.

The public in general, however, was much slower than Mark Twain to understand the potential usefulness of the Type-Writer. All anyone seemed to want was one, or perhaps two, of the 25-cent typewritten samples of the type that originally hooked Mr. Clemens. And it wasn't until 1878 that the Remington picture brightened.

This year hailed the advent of an attractive but slightly odd publication called *The Typewriter Magazine* (the hyphen and capitalization of the "W" somehow getting dropped along the way), edited by William O. Wyckoff. The magazine, according to its masthead, was somewhat loftily "devoted to true reform, to the welfare of all mankind, and to advancement and improvement in all things." Quite an ambition for a lone man and his moderately-circulated paper. However, Wyckoff fervently believed that the only true hope for the world's salvation was if every man and woman were to "forswear the use of pen and ink and take up typewriting."

Wyckoff insisted that the use of pen and ink created the evils of "pen paralysis, loss of sight, and curvature of the spine." He claimed that the typewriter could solve every modern problem. It could make one rich. The method was easy, wrote Wyckoff; "Purchase a Type-Writer and, having become expert, obtain a situation in some Law, Insurance, or Manufacturing or Merchant's office as a corresponding clerk or copyist." There, an enterprising typist could do "from three to twenty hours' work in one hour." Wyckoff proclaimed that such a well-equipped, dedicated worker could easily catch the eye of the boss and accelerate rapidly up the corporate ladder to "fame and fortune."

And if a man named Frank E. McGurrin had his way, this dedicated worker, namely McGurrin, would type FAST up the corporate ladder. And without looking at the keyboard. Since 1876, McGurrin had turned his dusty law clerk's office into a typewriting classroom. McGurrin found the venerable "hunt and peck" method far too slow for him to wade through his work. So, each night, McGurrin taught himself what he called his touch typing method. He boldly learned to operate the typewriter, using all of his fingers and without giving a glance at the keyboard. While McGurrin may not have realized Wyckoff's dream of a fast rise to "fame and fortune," he did manage a $2 a-week raise. And the touch typing system we still use today was born. Like most newborns, though, it had a problem getting up on its feet.

Since sales of the machine were so slow, no one cared how best to operate it. And stagnant sales had Densmore and Yost worried; their visions of wealth and ease were slipping slowly away. They didn't know of McGurrin's feat, nor would they have cared. They just wanted to unload the abominable machines. Their stepped-up sales force eventually sold the original Remington Type-Writing Co. to a company called Wyckoff, Seamans and Benedict. And so editor Wyckoff found another focus for his "world vision." He became the head salesman for this newly restructured Remington Type-Writing Co.

But his and the company's mission was far from an easy one. People not only remained unimpressed by the work of the Type-Writer, but even resented the messages the machine produced. Most people believed that handwriting was the only appropriate method for personal correspondence. Some felt insulted, confused, or both when they received typed letters. They considered the use of type an insult to their ability to read longhand. For example, a Texas insurance man, J. P. Johns, sent a typed note to one of his agents and received an indignant reply:

> I do not think it was necessary then, nor will it be in the future, to have your letters to me taken to the printers and set up like a handbill. I will be able to read your handwriting, and am deeply chagrined to think that you thought such a course necessary.

Others felt that the typewriter was by nature an invasion of privacy. They believed that no man was clever enough to work the machine without a machine operator's help and so even a love letter would have to be transcribed by an invading third party. To make matters worse, a typed petition to the Congress of the United States was loudly and publicly rejected. Under Congressional regulations of the time, only hand written or lithographed petitions could be submitted for consideration.

Wyckoff and his colleagues met these difficulties with patience. They believed in themselves. They believed in the typewriter. They knew if they persisted, their big break would come. When it did, they would be ready for it.

It came at the YWCA.

Until 1881, shorthand stenography was booming in the business world, but no one yet realized the link between this skill and typewriting. The men who almost exclusively filled the stenographer positions in business didn't type, but readily admitted the time they did save by dictating their work to a typist. However, typewriting, colored largely by public opinion, was considered to have a dubious future. This, coupled with the low wage the typist was offered (about $10 a week), made for few, if any, males clamoring for the job.

Enter the Young Women's Christian Association.

The YWCA typing classroom.

The YWCA had a brazen idea: typing as a career opportunity for women. The general populace scoffed at the idea, but the business community embraced it, if only out of necessity. The eight young women who completed the first six-month typing course offered by the YWCA got jobs within days of graduation. Despite the opinion of some that the daily routine of the office would inevitably produce "severe nervous disorders" in the fragile female psyche, the women were successful. Soon, the YWCA found itself unable to train enough typists to meet the growing demand.

The idea of young women working in a man's world, though, was a cause for some sly joking. Women typists themselves were at first called "typewriters" and this created some jokes with a double edge. For instance, there was the old story of the harried businessman who had suffered a reversal of his fortunes. In a letter to his wife he wrote:

> Dear Blanche,
>
> I have sold off all my office furniture, chairs, desks, etc., etc., and am writing this letter under difficulties with my typewriter on my lap.

Humor notwithstanding, Remington immediately opened schools. Private schools were founded. And women found the chink in the armor of male-dominated business. Tens of thousands of women, eager to find a spot in the business world, were soon clamoring to learn to type.

A spunky lady, M. V. Longley

But instruction on the typewriter was a haphazard affair, even at the schools. Although McGurrin had introduced touch typing some five years previously, that typing system was far from popular, and "Hunt and Peck" remained king. Typing instructors still taught each typist to use two or four fingers and assign them to whatever keys seemed best.

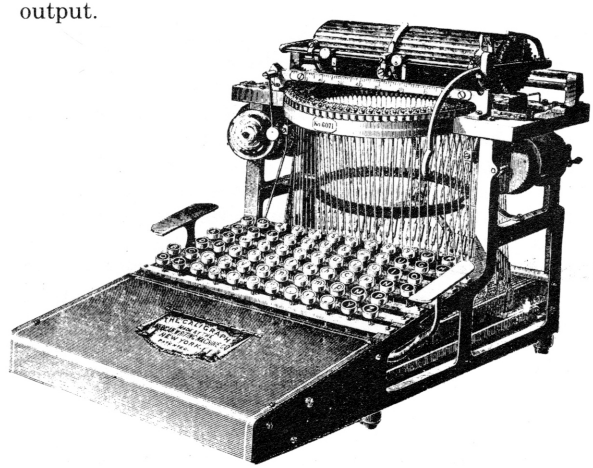
However in 1882, a spunky lady named Mrs. M. V. Longley began experimenting with what she called her "All-Finger Method" of typing. A pamphlet she composed that spring challenged everyone who operated a typewriter to use all fingers on both hands. It was a shocking idea, but the success of students from Longley's Shorthand and Typewriting Institute made some typists take notice.

What really gave the all-finger technique the boost it needed, though, was the first typewriting contest.

Held in Cincinnati in the summer of 1888, the contest featured our Frank McGurrin and one Louis Traub, champion of the "four finger" typewriting method. And while on the surface the event only pitted the techniques of two men against each other, much more was at stake. The two different styles of typing, McGurrin with his touch strategy and Traub with his limited-finger, "view the keyboard" method were at odds. The touch system won, hands down. The results were splashed on the front pages of newspapers from coast to coast. Frank McGurrin won $500 and the world won a new popular typing method.

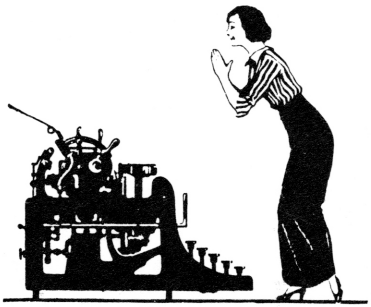
Subsequent typing contests, sponsored by touch typewriting converts including O.P. Judd, manager of the Remington office in Omaha, Nebraska, helped spread the word. The touch method began to sweep the country.

All this excitement about typewriting methods also lit a flame under the sales of the machines. Wyckoff, Seamans & Benedict couldn't have been more thrilled. They had the great good fortune to be selling the one and only typewriter on the market. Knowing that they must build on this incredible lead, Wyckoff and company tried everything they could to increase their company's size and output.



The Caligraph, the machine on which Louis Traub lost.

They started with what they considered a rather silly, but hopefully successful, promotional stunt. They placed young ladies (the prettier, the better) with Remingtons in the best hotels in the leading cities. They wanted to suggest that top-flight business executives were so hooked on typewriting that they needed a typist's services even while traveling. But, interestingly, what started out as mere publicity quickly grew into a thriving business. Typewriters ended up in hotels from coast to coast.



Some advertisers used humor...

The women who went headfirst into the business world, however, didn't have an easy time of it. As suggested by the "typewriter" joke earlier, these female typists were often judged as much on their appearance and femininity as their office ability. They were generally under the constant scrutiny of their male co-workers, who were trying to get used to women in the business workplace.

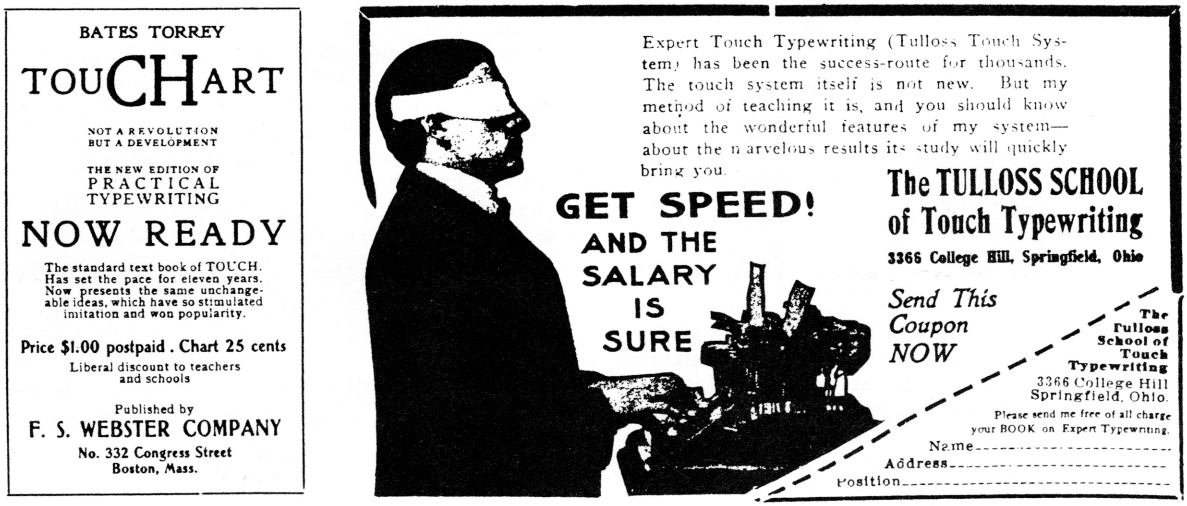
And women were grossly underpaid. In fact, a common typewriter sales pitch was that though the initial typewriter was rather costly at $125, a mere $600 a year could bring the executive a "lovely girl" to work the machine and "brighten up the office." Nevertheless, many women were so eager to leave their jobs as "shop girls" or domestic help (the only other "respectable" employment for women at that time), that they quickly snapped up the meager pay in the hope of a brighter future. By 1888, there were sixty thousand female typists in the United States.

While a great many of these typists used some variation of the touch method in their work, there was still no set formula for how to teach the system. McGurrin created the touch *method*, Longley taught the touch *system* and the many business schools instructed what they believed to be *touch typing*. Each of these, however, contained widely different fingering techniques.

It wasn't until 1889 and Bates Torrey's *Manual for Practical Typing* that the touch system was even put to paper. But his fingering still wasn't consistent. (The "r" might be typed by one finger in one word and then by a different finger in another.)

The fingering taught today is due to the work of Cuspus Van Sant. This typing teacher and student of psychology understood that the mind works better when learning rules that are free from exceptions. One afternoon while fixing the clock in his typing classroom, Van Sant came upon the idea of assigning each key to a finger. To achieve this, though, he realized he would have to assign more than one key to some fingers. As the index fingers were considered the strongest, Van Sant gave each of these the double duty. His text on typewriting was published three months later. We even base our modern fingering method on Van Sant's philosophy.

"The $600-a-Year Girl"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The standard text book of TOUCH.
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The "Touch" Revolution

Typewriter sales continued to climb, especially with this constant flow of typewriting innovations. Wyckoff and Company were in the best position possible. Not only did they manufacture the only typewriter in the country, they also owned the most workable typewriter patents. To meet the demand created by an increased typing community, Remington decided not only to increase production, but to work on the design. Designer Jenne and his co-worker, Jefferson M. Clough, took the famous flowers off their sewing-machine-inspired typewriter and added a 'Shift Key,' introducing, for the first time, *lower case letters* to the typewriting phenomenon. Other, if minor, improvements were also added, but one major problem continued. The typist working the machine was still left in the dark, literally. She (or he) still couldn't see the line being typed.

This "blind typing" was due to the "back" or "down" strike method incorporated in all typewriters up to this point. The key would strike down onto the *back* of the paper, hiding the printed words from the typist's view. Several inventors tried to solve this problem, with varying degrees of success. Wyckoff's Remington Co. felt itself too important even to address the problem. But in 1896 a young company by the name of Underwood solved it.

Underwood was to make Wyckoff and his Remington executives quake in their boots. They did it by using the invention of Franz Wagner, considered the greatest typewriting creator since Sholes. In 1899, he introduced what was to be the immensely popular "Model 5." This model incorporated the problem-solving "up-strike" method of key-to-paper contact. Wagner's method allowed the keys to strike the sheet and then fall easily down into place. The typist had a perfectly clear view of what was just typed!

To dull further the Remington edge, the talented inventor team of the Smith brothers (no relation to the cough drop Smiths) formed a company dedicated to the "up strike" principle. They believed so strongly in this innovation, that they plastered their feeling on signs and billboards all along the railroad tracks that ran past their factory. Perhaps this bit of advertising worked, but undoubtedly, those train travelers not familiar with the controversy ended up mightily confused by signs containing slogans like, "UP STRIKE ALL THE WAY!" and "YOU ARE RIGHT SIDE UP; WHY WRITE UPSIDE DOWN?" with no further explanation.

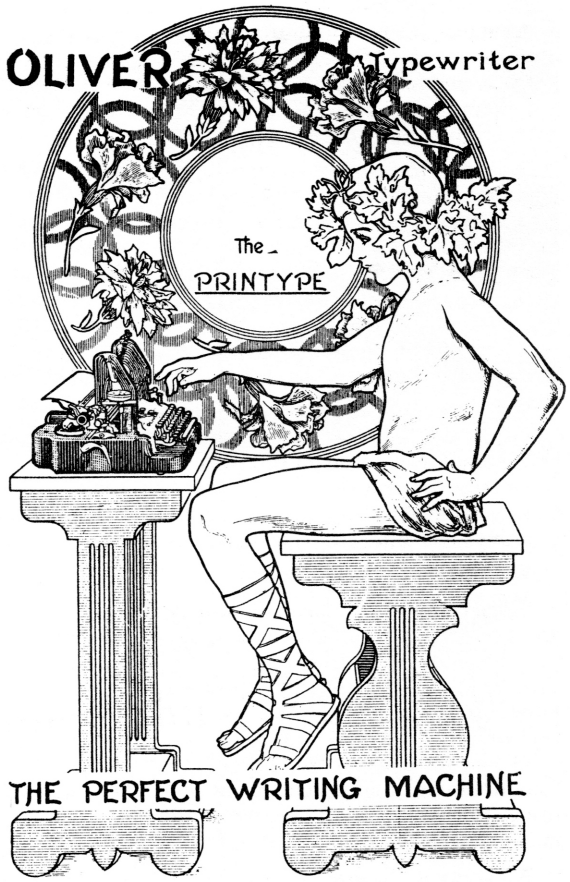
Another innovator, Edward B. Hess, charged onto the scene. A barrel-shaped man known for his spontaneous bursts into operatic arias and Shakespearean prose, Hess was granted 140 patents during his lifetime. Though a real "idea" man, Hess' typewriting innovations didn't have anywhere near the impact his personality did. In fact, his important idea for a fast, light keyboard would have died (along with his company) had not the multimillionaire Thomas Fortune Ryan handed over a check for $220,000 in 1906. Thus, another major contender entered the typewriter arena: the Royal Typewriter.

As typewriter mechanisms improved, so did methods for working the machine. There was still some controversy over the proper typing method, even though in 1901 a Remington Company survey revealed that over half the schools in America taught the touch system with the Van Sant fingering. Though the future seemed bright for this method, many teachers still remained somewhat hesitant to embrace this "all fingers, no sight" approach.

Their reluctance was due as much to the typewriter companies as to the novelty of touch typing. These companies immediately recognized the sales angle of the touch system. They trumpeted the typewriter, with its "touch" approach, as the new time-saving device. Each company struggled to be the forerunner in "touch" innovations. Each sent any number of efficiency experts to hawk their company's machines and the touch method to teachers nationwide.

The only trouble was that virtually no one bothered to design a uniform training system for touch typing and Van Sant fingering. These "touch experts" created often conflicting answers to fingering and speed questions at the drop of a hat. So the typewriters were selling, the fingers were flying, but everyone was getting confused.

To make matters worse, the typing manuals that did exist added virtually no explanatory text. Torrey's manual of 1889, although considered innovative, never gained widespread popularity. The newer manuals contained page after page of letter and sometimes word, drills. Learning consisted solely of copying letters off the page.



Typewriter companies began pouring money into advertising.

A number of these books included a compendium of actual business letters, but no instructions on how one might learn from the samples. Again, students simply copied from the page. The teachers were no help. They were assigned to do little more than patrol classrooms while they corrected typing tests. Still, typing was on the rise. Business had recognized the need. Classrooms were full. And more and more typewriters were being produced.

Between 1905 and 1915, over one hundred separate typewriter manufacturing companies sprang up. Competition for sales was fierce. But the market was primed. The typewriter had come of age. It no longer had to prove its worth. Now it was merely a question of which brand to buy.

Salesmen created new ways to entice office managers and company directors to buy. One way to increase sales was to contact an interested business and leave a typewriter as a "demonstrator" for a week. This policy, introduced by Wyckoff's Remington Co., soon became an industry practice. In fact, most businesses had two or three typewriters "on approval" at any given time. It was an easy foot in the door for the salesmen. It also proved to be their biggest headache.

Leaving a demonstrator was indeed a way to get your company's name on the boss' mind when it came time for ordering. But it was also a way to have your typewriters severely damaged while "on approval," with no sale ever made.

Worse, thieves had a field day.

Since competition for sales was fierce, typewriters were left at the drop of a hat. Credit and references were hastily checked, if at all. And thieves knew it. Unscrupulous characters would blow into town, set up a "business" and get several typewriters delivered on trial. By the time the salesmen returned with hopes of closing a deal, the "businessmen" had unloaded the goods and skipped town. Typewriter theft became so common that many detectives specialized in their retrieval.

All these goings on, however, didn't put a dent in the growth of the typewriter's popularity. By 1910, over two million typewriters had been sold in the United States.

In addition to office personnel, another group to embrace the typewriter was newspapermen. And while the salesmen loved the journalists' reaction, they were soon frustrated when an old, battered machine in the city room became the sign of a star reporter. So, the typewriter salesmen concentrated instead on women in the office.

Promotions offered dainty little gifts with a purchase. Typewriter ribbons were packaged in metal cases. These cases were costlier and harder to package at the factory, but typewriter companies felt the women might like to use them later to hold hairpins. By 1912, competition grew to such a frenzy that the typewriter community saw its first "fire engine chasers." These were salesmen who literally chased after fire trucks. After all, clouds of smoke in the business district might mean big replacement orders for the charred, twisted remains of typewriters.

The Star Reporter!

Now that the typewriter had become a fixture, people wanted more from it. They wanted speed. Typing contests had been used successfully to spread Frank McGurrin's touch typing. Now, contests were to be used as something else—Public entertainment.

Soon the public began to take speed typing seriously. Like boxing or baseball, it became a national sport. Contests were staged regularly and with serious preparation. However, when it came to

Charles Smith's Speed Team

speed, not all companies were created equally. Not that the machines themselves were that different. Each had its particular characteristics, but these didn't make or break a contest.

A man named Charles E. Smith did.

The Underwood company could thank him for their unbroken string of speed-typing victories. Smith trained the Underwood stable of competition typists hard. They trained eight hours a day, five days a week. To Smith and those he trained, typing was a way of life. With success came national and often international acclaim. With failure, countless hours back at the keyboard.

The rules were strict. All the letters had to be perfectly centered in their spaces, there could be no more than 76 and no fewer than 61 letters to a line and no character could be darker than the others. Points were deducted for all the common typing errors. On what were still klunky, manual Underwoods, these typists typed upwards of 140 words per minute. Eventually, though, Underwood's unbroken winning streak killed the very sport it helped create. The public grew tired of the monotony of typing contests that Underwood always won, and the national furor died down.

The excitement didn't die down for typewriting itself. With the advent of World War I and the desire for leaner, more efficiently run businesses, teaching typewriting was elevated to a kind of science. Still using the basics of Van Sant fingering, the best method for introducing key locations and finger reaches became a big source of controversy. Some advocated learning all the keys controlled by one finger before moving on to the next. This "First-finger-first" idea, as it came to be known, battled with the "Skip Around" method which advocated complete word drills, whatever the fingers involved. All in all, accuracy was stressed until students were forced to type and retype practice pages until they were letter-perfect.

Blank keyboards even came into vogue as another attempt to increase typists' speeds and accuracy. Many companies also spent a pretty penny investing in typewriter keyboard "shields" to block the typists' view of the keys and so increase productivity in the office.

Businessmen became so enthralled with typewriting that they took great pride in boasting about their secretaries' speed and accuracy. It became quite the talk over brandy and cigars.

If how to increase office productivity was a question of the day, dictation was, for many businessmen, the answer. Executives discovered the speed and ease of dictating letters. They could talk as fast as they wished and correct as often as they

liked without the effort of taking pen to paper. "Dictated but not signed" became the familiar ending to a business letter as a way for an executive to look too busy to check his correspondence. "Dictated but not read" soon followed. Then, at perhaps the height of such executive freedom came, "Dictated by transatlantic telephone and recorded on tape but not read and not signed."

Typewriting influenced other businesses as well. By 1915, the advent of typewriters caused more dictionaries to be published. Teachers noticed that spelling improved because incorrect spelling could no longer be blamed on poor penmanship!

Typewriting even flirted briefly with life as a detective. Because of the unique characteristics of individual typewriters (not unlike fingerprints), typewriters were used to identify criminals in several fictional and real-life criminal cases. In each case, the criminal(s) were narrowed down to those suspects who used a particular typewriter. Just think: a person's destiny might lie in the missing serif of his capital "M"!

By the 1920's, women were accepted as an integral part of the American work place. And oddly enough, it was Christopher Sholes and not William Burt who received credit for the "invention" of the typewriter in America. Sholes' success in actually taking his machine to market did the trick. Sholes was now elevated in the writings of many journalists to the level of populist-saint. After all, typewriting proved to be the emancipation of many women. Of course, there were also those who saw how hard women were now working and considered Sholes a heartless villain.

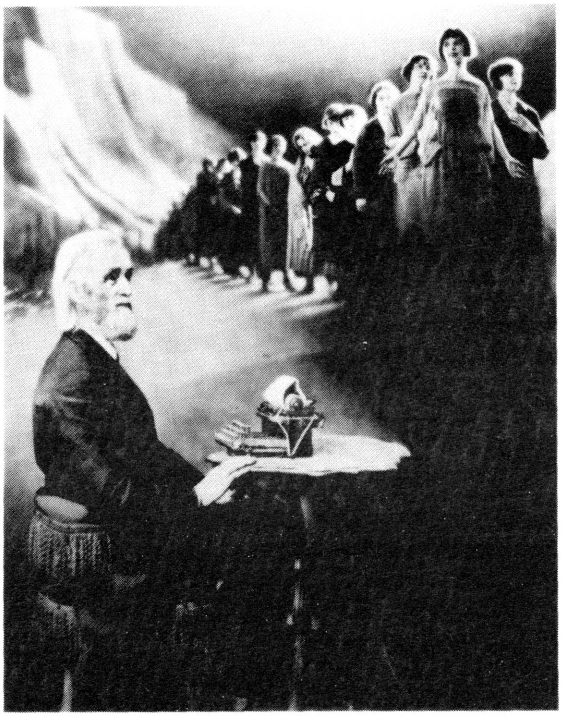
Typewriting occupied many people's minds. The subject as a whole stirred up its share of not only controversy but romance as well. In the 1930's, a survey of girls between the ages of ten and sixteen asked the question, "Which would you rather be when you grow up, a typist or a movie star?" Of the ten year-old girls, 14% said they'd rather be typists, 29% wanted to be movie stars. By the time the girls were sixteen, however, 32% wanted to be typists and only 5% dreamed of Hollywood's bright lights.

With all this stress on speed and precision, it was inevitable that people would start taking a second look at the typewriter keyboard. The awkward machinery that initially caused our friend Sholes to make such a mess of his key placement was long gone. So, one would expect that a more efficient keyboard would replace it, right? Wrong! People had grown used to the QWERTY keyboard and were hard-put to accept any other.

He talks, she types.

A valiant soul by the name of August Dvorak tried his best, though. A confirmed efficiency expert, Dvorak studied the English language, but not for common letter patterns to separate and thus slow the typist down. Dvorak examined the language with the express purpose of putting letters in frequent patterns next to each other. His keyboard, not surprisingly called the Dvorak keyboard, increased accuracy in typing almost 50% and speed by 15% to 20%.

The effects of America's Depression and some ill-timed sales ventures contributed to the almost immediate demise of the Dvorak keyboard. These



Sholes, the Emancipator of Women!

events, coupled with the familiarity people felt with QWERTY, simply stopped Dvorak in his tracks. It wasn't until well into this century that this system of key placement was reintroduced with some amount of success.

(For more about learning how to type on the Dvorak keyboard using "Mavis Beacon Teaches Typing," be sure to read Section 8 in this manual.)

Dvorak's work did not result in the popularization of a new keyboard, but it did redouble the emphasis on accuracy in typewriting. However, accuracy was no longer to be strived for merely by copying typing drills from a textbook. Along with those of August Dvorak, other detailed studies in typewriting motion and efficiency were done.

Texts were created focussing on properly placed letter and word construction. People were stuck on the QWERTY keyboard and wanted rules to help them get the most from it. Instead of concentrating on speed alone, typing teachers began to try to understand *how* their students learned. "Kinesthetics" were introduced as a means of increasing both speed and accuracy.

(That is, a concern for the "feel" of the typewriter keys and how to reach them and return to the typewriter's second or "Home Row," effectively.)

The teaching of typing had finally come of age. All of this activity spoke very well for the popularity of the typewriter. It was unquestionably fixed in the business world of America. But in 1930, few, if any, people could afford to buy new machines.

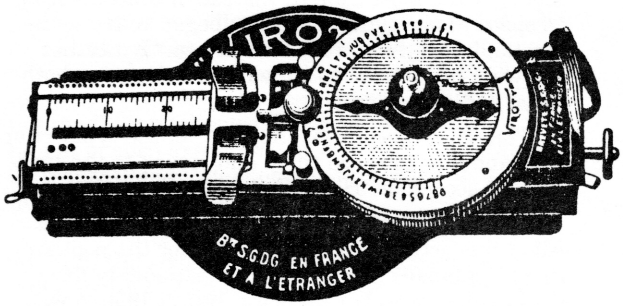
The Depression was taking its toll.

With the stock market crash and subsequent failure of business after business, the survivors tightened their purchasing budgets. People held on to their typewriters longer or bought rebuilt machines to save on expense. Some salesmen got so desperate that they were known to buy and destroy these refurbished machines just to create a market for their new models.

To make matters worse, after 1930, people got even pickier about the typewriters they did buy.

Typewriters were no longer a luxury or a curiosity, they were a fact of everyday life. Typewriter salesmen had to adjust their sales approach accordingly. As always in the history of commerce, salesmanship had to make a market. With a public now blasé about the machine, the marketers had to be creative to lift the typewriter out of the sales doldrums. They found the hook: portability became the new "must have."

Every company came out with its own portable typewriter, down to the $5 "Pocket Virotop." The Royal Co. released its portable line in a spectrum of over 500 color combinations in hopes of luring some of the female buyers in America's fifteen million homes. Even Cartier got into the act with a $1,150, 24K gold-plated typewriter. Royal went so far as to throw eleven thousand of its typewriters out of airplanes all across the country in an effort to prove how sturdy they were. It worked! Royal stole the lead that Underwood had held for nearly two decades.



Small is Beautiful—The $5 Virotop

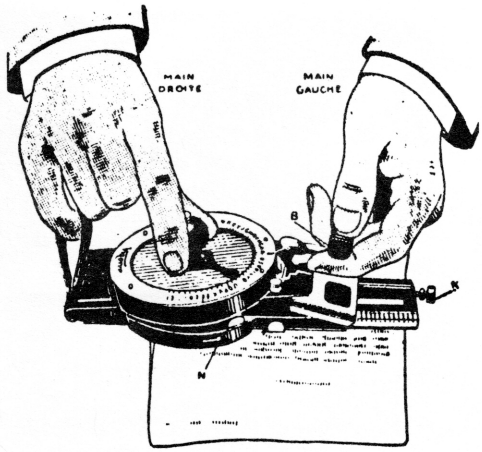
The next real innovation came in 1933: the coupling of typing and electricity. This revolution was pioneered by the industrial giant, International Business Machines. Suddenly electric typing became the new status symbol and the power of IBM solidified. Throughout the ensuing years the craving for electricity as a means of increasing typing speed grew. Today, electric typewriters account for almost 100% of the market.

That part of the market, however, that isn't taken up by computers and word processors. These machines have revolutionized the business and home typewriter market: they not only write, they calculate, compile, store, remind, and play games!

One thing remains necessary if we are to maximize the use we get from our computer systems. Just like Burt and Sholes and every woman who wanted to break into the "front office" in 1881, we need to master the keyboard, even if it is now a computer keyboard!

Interestingly enough, the development of computer keyboard instruction followed the same kind of path as instruction for the typewriter.

The first computer typing programs were just like the original typing manuals that appeared at the end of the last century. They tended to concentrate on simple letter and word drills. It was assumed that mere repetitious use of the keyboard would produce both speed and accuracy. Like the original cumbersome, tiring typewriting machines, the first computer typing programs were equally fatiguing—both to watch and manipulate. These programs made little, if any, attempt to analyze user typing errors.



Now, because of such pioneering work, we can bring you comfortable, yet challenging lessons that combine both speed and accuracy in teaching. With our use of artificial intelligence, typing errors can be analyzed and corrected instantly, before they become habits. Using the latest graphics technology, we can bring you clear, colorful, realistic images, superior to any ever created before. All of these advantages make "Mavis Beacon Teaches Typing" an adventure in fascinating, accelerated, fun-filled learning.

So now, when you sit at your computer terminal to type and print out your writing in a matter of minutes, remember the frustration you'd have felt in 1828 with cramped hands, ink-stained pages and hours of writing to go...

And breathe a sigh of relief.

Typing Fundamentals

"Like a musical instrument, the typewriter is passive, and until played upon by the human hand it is useless."

William Allen Gilbert (1930)

When you sit at a computer keyboard, a world of possibilities lies before you. You can create anything you need—a letter, a report, a record of some random thoughts. All it takes is a little practice and you'll never have to worry about tedious handwriting again!

"Mavis Beacon Teaches Typing" makes learning easy. For beginners, Mavis starts with the very basics of typewriting. You'll learn the arrangement of the keyboard and how to use the correct finger for each key. Once you've mastered these fundamentals, Mavis will analyze your progress. From that point on, you'll get fully personalized tutorials.

From the moment you begin your first lesson, Mavis begins to compile information about your progress, designing the course to meet your individual needs. It is important, therefore, that when you start your lessons (at your selected level—Beginner, Intermediate or Advanced) you follow Mavis' recommendations

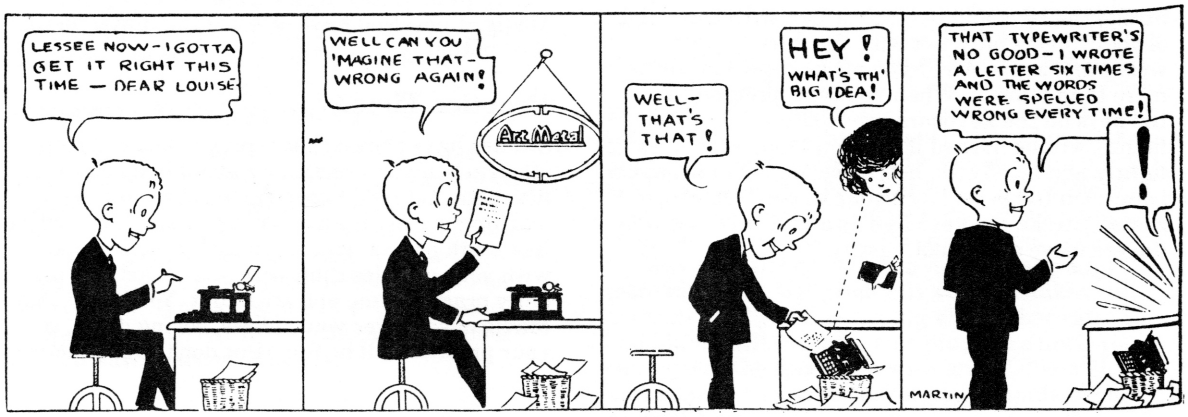
Take each lesson as it's presented. Once you've completed a lesson, and are comfortable with what you've been taught, feel free to adjust the program settings, turn any lesson into a video game, or pause for an updated graph of your progress. Get familiar with the program. You'll be surprised at the number of things Mavis can do. If you ever get stuck or need instant information, on-line help is only a keystroke away.

Levels of Instruction

If you have never typed before, or know nothing of the touch typing method, you are, clearly, a beginner. If you can type a little, but not faster than about 20 words per minute (WPM), you should still select the Beginner category. The Beginner level will increase your speed and prepare you for the next step.

A typing speed of somewhere over 20 WPM puts you in the Intermediate category. Here, Mavis will review keyboard fundamentals and give you some practice text to type. Next, she will analyze your typing and suggest lessons to help you improve, all the way to the Advanced category.

If you consider yourself an advanced typist, the Advanced lessons will get your fingers warmed-up and then let you try typing some advanced text. Mavis will analyze your typing and construct lessons that address your weaknesses and reinforce your strengths. At this level, you can perfect your speed and accuracy to the n^{th} degree—the sky's the limit, and Mavis will be with you every step of the way.


LESSEE NOW-I GOTTA GET IT RIGHT THIS TIME — DEAR LOUISE
WELL CAN YOU 'MAGINE THAT-WRONG AGAIN!
ATTN: Mavis
WELL-THAT'S THAT!
HEY! WHAT'S TH' BIG IDEA!
THAT TYPEWRITER'S NO GOOD-I WROTE A LETTER SIX TIMES AND THE WORDS WERE SPELLED WRONG EVERY TIME!
!
MARTIN

Keyboard and Chair

If you're going to be seated in front of your computer for any amount of time, good posture is essential. Your keyboard should be at a height that is level with your elbows. You shouldn't have to reach up or down to touch the keys. Your chair should be comfortable but firm. A chair that's designed specifically for typing comfort or computer use can be a worthwhile investment.

Correct Typing Posture

Sit with your feet firmly on the floor, twelve inches or so apart. Your upper arms almost vertical; elbows hanging freely, a little below the level of the keyboard. Because the columns of the computer keys slant to the left (see illustration p. 24), you will sit with the middle of your body opposite the M. That is, you sit slightly to the right, off the center of the keyboard.

Hand Position

Extend your hands to the keyboard, and let your fingers lightly touch the second row of keys above the 'Space Bar.' This row of keys is called the "Home Row," and you'll begin and end all your typing strokes from this position. Your fingers should curl naturally over the keyboard, and your right thumb should touch the 'Space Bar' lightly.

Typing the Keys

Stroke the keys and the 'Space Bar' with the weight of your fingers only, not with the force of your wrists and arms. An electronic keyboard needs no more than a touch. When you type, pretend that the keys on the keyboard are "red-hot," that your fingers will be burned if you don't touch the keys lightly and briefly. Do not, however, let your fingers bounce on the keys. Keep your wrists flat—horizontal. Stroke the keys lightly and firmly. Let your fingers move easily, not hastily.

The Backspace Key

In the days when all typing was printed directly onto the paper, the 'Backspace Key' was used more to align the typewriter keys with the paper than anything else. Mistakes were corrected after the document was completed.

Today, modern word processors allow you to use the 'Backspace Key' to back up, erase and then correct your errors as you type. Mavis considers this key useful, but its use should not compromise your typing goal. She'd like nothing better than for you to learn to type quickly and accurately and not use the 'Backspace Key' at all! However, most of us do make mistakes from time to time and the 'Backspace Key' can be useful.

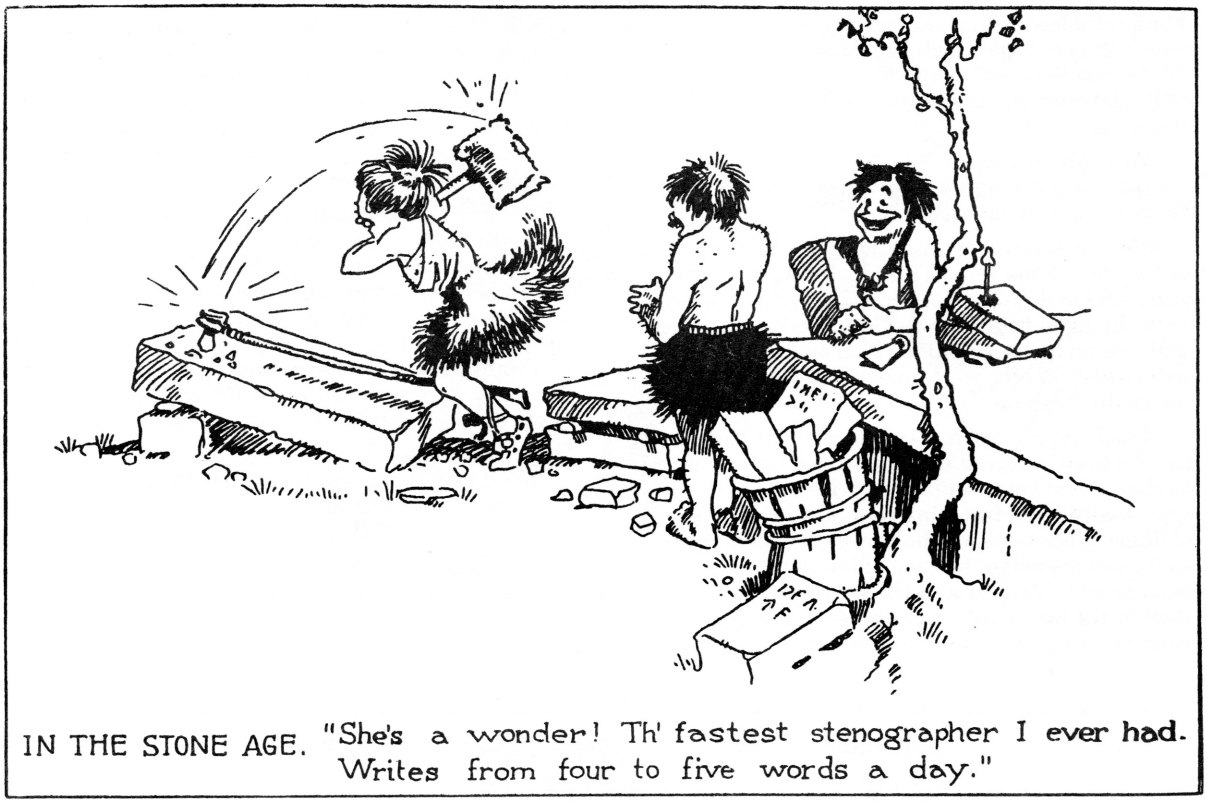
Mavis allows you to practice with or without the 'Backspace Key.' Working without the 'Backspace Key' is great practice for those times when you'll be working on a typewriter that doesn't allow backspace correction. Remember, if you do choose to work with the 'Backspace Key' "on," your goal is to type so well that you never need to backspace. It *is* a convenience, but think how much more convenient it would be if you didn't have any typing errors to correct!

The Enter/Return Key

Most modern word processors have a "word wrap" feature that automatically advances lines as you type. Because of this, you'll never have to use the 'Enter/Return Key' when taking a lesson from Mavis, unless you have selected the 'Enter/Return Key' option.

Practice Time

Studies have shown that typing is learned more efficiently if you practice for about one hour a day; not more, not less. Learning to type is more like learning a sport than learning an academic subject like math or economics. Typing has more to do with your muscles than with your mind. Set aside a daily practice time and stick to it. You'll find that Mavis never gives you endless, boring drills, so your practice will be fun. (But don't over-practice.



Drawing by J. Stanley Summerhayes of Sydney, Australia

You won't learn any faster if you spend eight hours in front of your keyboard and video screen. Take your time—about one hour of it, once a day.)

Increasing Your Typing Speed

Notice that some keys are easier to type than others. You will find that some of your fingers type more naturally than others. The secret of typing speedily lies in the flexibility and control of each finger. This includes how fast each of your fingers types a key and how fast it returns to its "Home Row" position. Typing fast is easier than typing each key correctly, but real speed can only come after you have learned accuracy.

The principle is this: Increase your speed to a higher level only after you have gained complete control at a lower level. You can measure your typing ability, as Mavis does, by the number of errors you make. If you make many errors, you're typing faster than your ability to control your keystrokes. Your first goal should be to type at about one keystroke per second. This means typing at a speed of about twelve WPM. Once you are able to type at this speed, increase your speed to fifteen WPM, or let Mavis challenge you. You might make a few more mistakes, but gradually your mistakes will decrease, and you'll be typing at a higher rate. You and Mavis will continue this procedure until you can type at the speed you wish and Mavis will make specific suggestions for your improvement along the way.

Keyboard Basics: A Review

For a complete tour of the keyboard and to learn which fingers type which keys, just ask Mavis for "Keys and Fingers." (This section of the manual will introduce you to some of the basics you'll be learning.)

With "Mavis Beacon Teaches Typing," you'll master the touch typing method which uses the "Home Row" as your home base.

Mavis will have you use the third row from the top as the "Home Row." This is where your fingers start, end and return between keystrokes. Starting with the little finger of your left hand, your fingers will rest on the A, S, D, F, J, K, L and ; keys. Mavis will teach you how your fingers can reach to cover the entire keyboard.

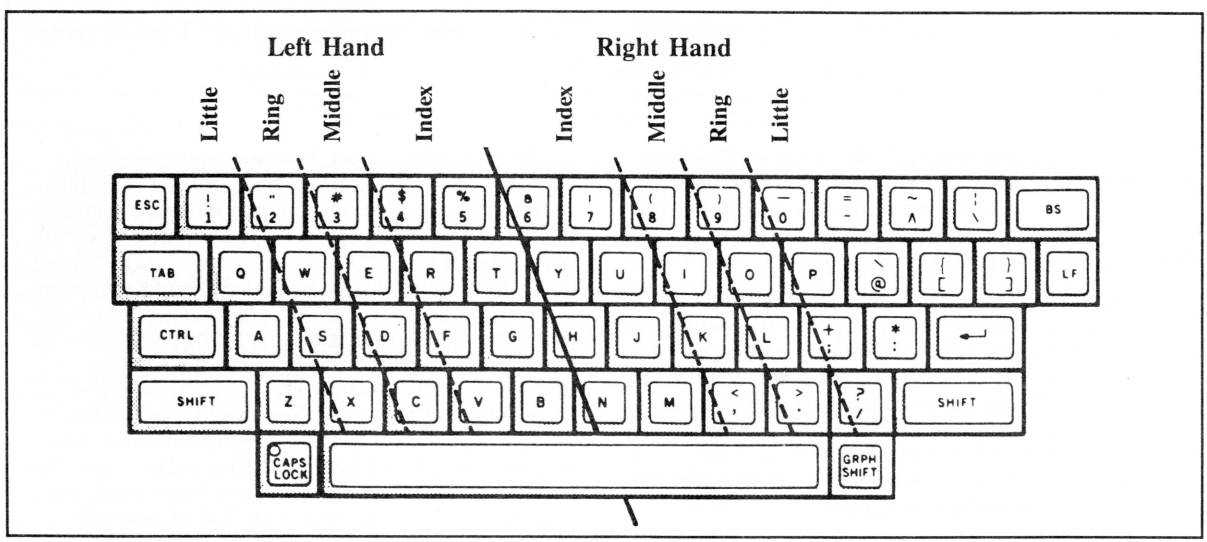
"Touch Typing" means typing without looking at the keyboard, relying instead on the "touch" of the keyboard and your familiarity with it to help you type accurately. Mastering this "kinesthetic" sense of finger placement will help you increase speed as well as save energy. Instead of having constantly to look up and down, first at the words you're typing, then at the keyboard, you can keep your eyes on your work and get more done faster!

The illustration below is a keyboard that looks like the one on which you will be learning. Notice how there are lines separating the keys from each other. Between the lines you will see the keys each finger controls. For example; the left index finger strikes the F, G, R, T, V, B, 4, 5 keys. These keys are sectioned off together.

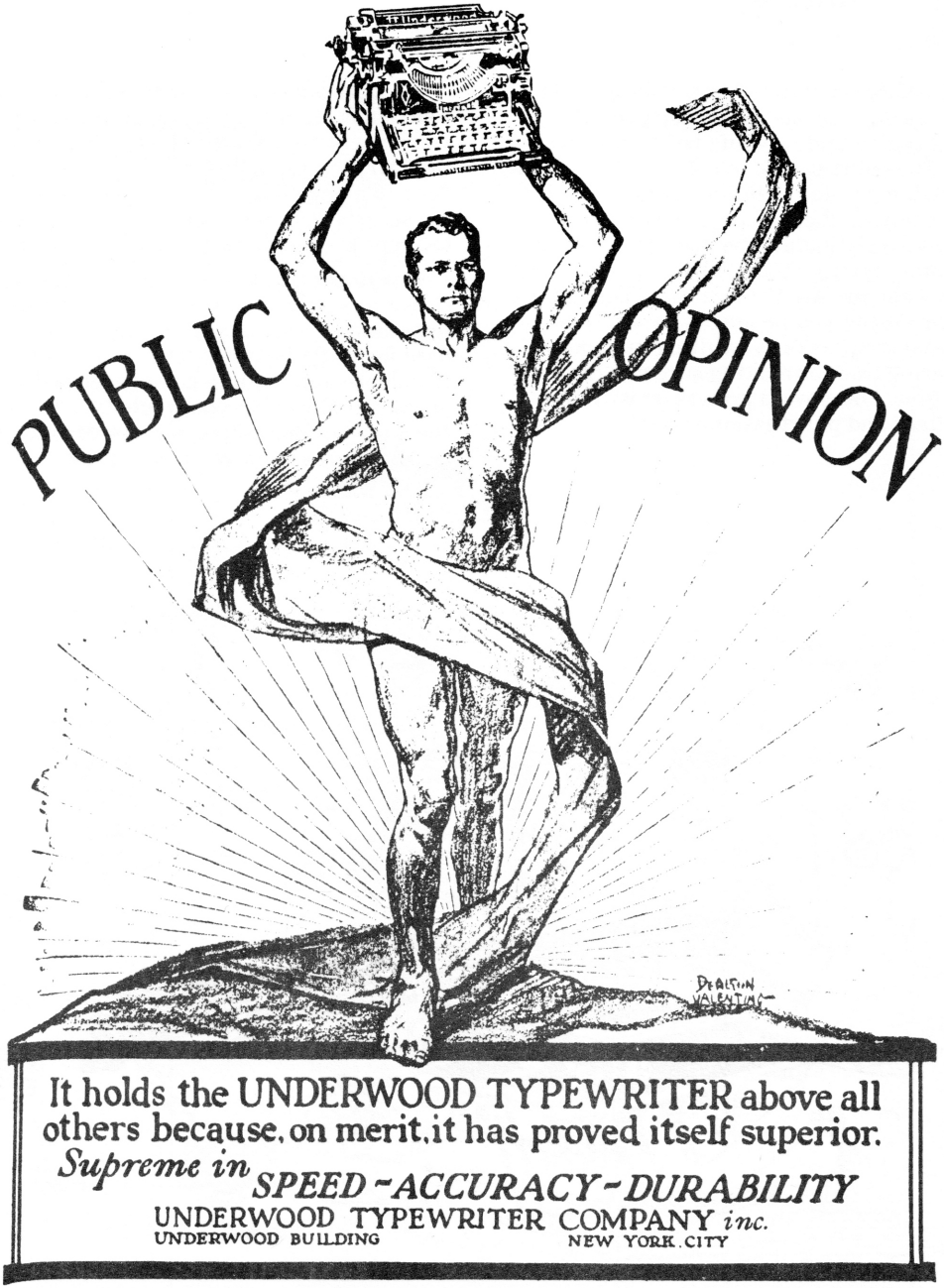
The keys labeled with letters of the alphabet normally type a lowercase letter when struck. To get an uppercase letter, you must hold down a 'Shift Key' when you strike the letter key. The correct technique is to hold down the 'Shift Key' nearest the pinky finger of your other hand. For example, if you want to type an uppercase F, you should strike the F key with your left index finger, while holding down the right 'Shift Key' with the pinky of your right hand.

You'll also learn how to use the 'Backspace,' 'Return' and 'Tab' keys. These are controlled by the fingers designated here.

Now that you've read about the basics, you're even more prepared to begin learning with Mavis!



The Standard QWERTY


PUBLIC OPINION
DEALTIN VALENTINE
It holds the UNDERWOOD TYPEWRITER above all others because, on merit, it has proved itself superior.
Supreme in SPEED - ACCURACY - DURABILITY
UNDERWOOD TYPEWRITER COMPANY inc.
UNDERWOOD BUILDING
NEW YORK CITY

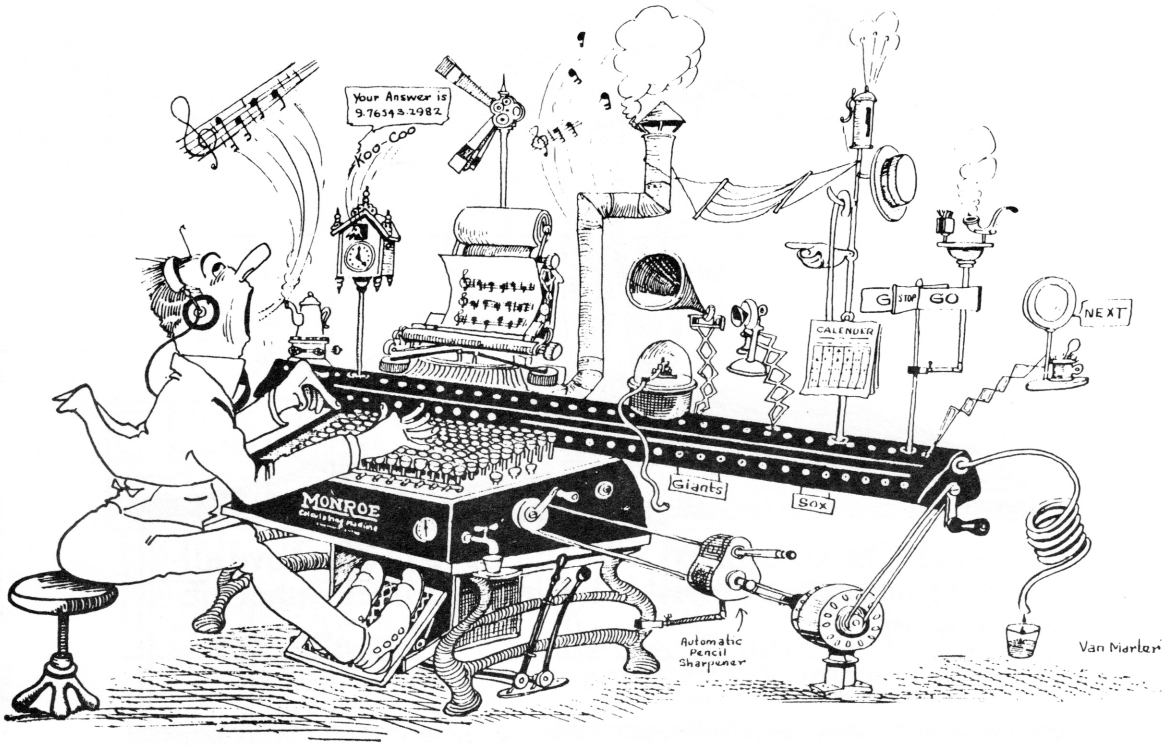
Underwood Typewriter advertisement

Typing Business Letters

In the days before computers, formal documents such as letters and reports demanded careful, painstaking typing and retyping before they were completed. The effort it took to prepare these documents was often greater than the energy initially required to compose them. Today, modern word processors routinely handle the most cumbersome, time consuming typing chores, allowing you to concentrate on what you are trying to say. Thanks to your word processor, you no longer have to worry about such nagging tasks as "whiting-out" mistakes, centering lines or making sure you have the proper margins. Many word processors will even correct spelling and punctuation errors!

No matter how good a writer you are, your reader's reaction is often swayed significantly by the way you present your material. Nothing kills a beautifully written piece faster than having so many lines to a page that the work is difficult to read. Or worse, establishing no clear indentations or columns so your information is difficult to pick out.

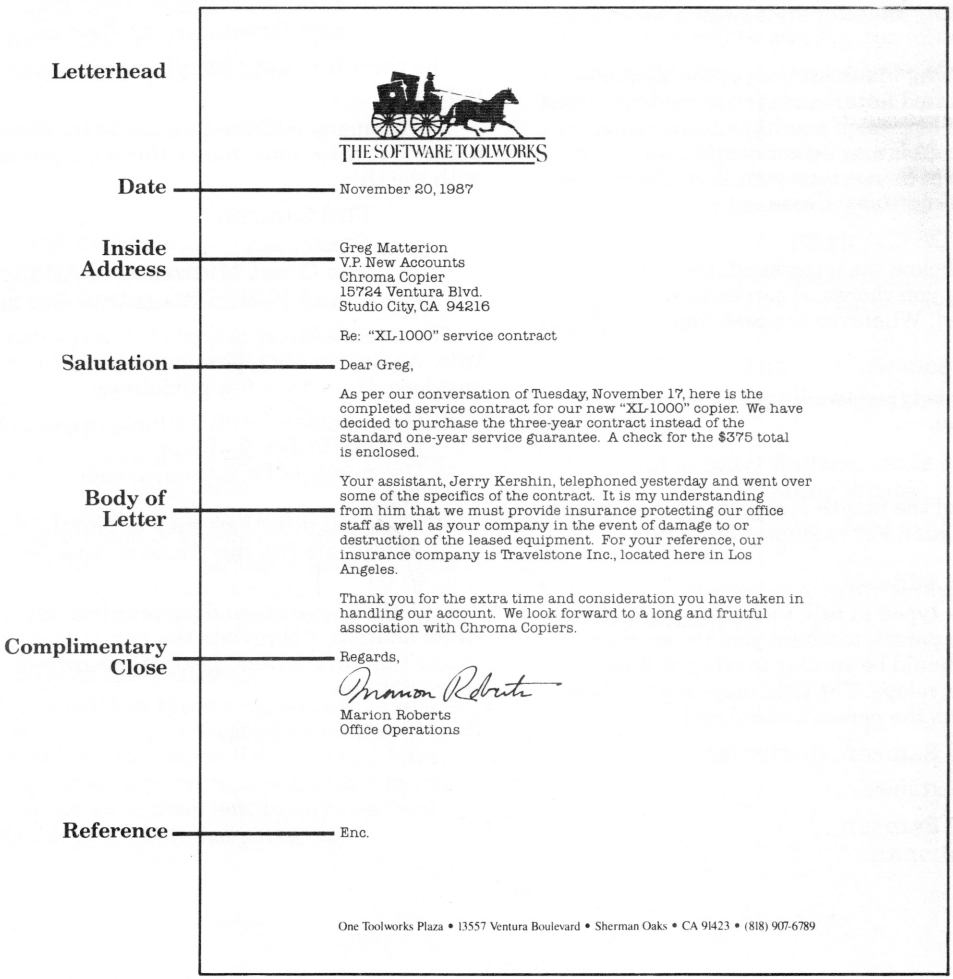
It is important to present all written communication in a precise, attractive way to make the best impression possible on your reader. Certain standard forms for business letters, personal correspondence and the like have developed over the years and Mavis Beacon would like to introduce them to you. Remember, a clear, concise presentation enhances what you have to say.



The Calculating Machine, cousin to the Typewriter

The Business Letter

All formal letter formats contain the same basic elements. These are: the **Letterhead** or **Originating Address** (that is, your address), the **Date,** the **Inside Address** (the address of the recipient), the **Salutation,** the **Body of the Letter,** the **Complimentary Close,** and the **Reference.** The illustration below shows the position of each of these elements.


Letterhead
THE SOFTWARE TOOLWORKS
Date
November 20, 1987
Inside Address
Greg Matterion
V.P. New Accounts
Chroma Copier
15724 Ventura Blvd.
Studio City, CA 94216
Re: "XL-1000" service contract
Salutation
Dear Greg,
As per our conversation of Tuesday, November 17, here is the completed service contract for our new "XL-1000" copier. We have decided to purchase the three-year contract instead of the standard one-year service guarantee. A check for the $375 total is enclosed.
Body of Letter
Your assistant, Jerry Kershin, telephoned yesterday and went over some of the specifics of the contract. It is my understanding from him that we must provide insurance protecting our office staff as well as your company in the event of damage to or destruction of the leased equipment. For your reference, our insurance company is Travelstone Inc., located here in Los Angeles.
Thank you for the extra time and consideration you have taken in handling our account. We look forward to a long and fruitful association with Chroma Copiers.
Complimentary Close
Regards,
Marion Roberts
Office Operations
Reference
Enc.
One Toolworks Plaza • 13557 Ventura Boulevard • Sherman Oaks • CA 91423 • (818) 907-6789

1. **The Originating Address or Letterhead**

Many people use pre-printed letterhead stationery for both business and personal use. For business, your name, company address and telephone number are usually included. For personal use, many people simply use their names, but your home address (and phone number if you like, although this is rarely included) may be added as well. This information is located at the top of your first page of stationery and usually takes up about two inches of space. The letterhead may be centered, flush right or left, depending on letter style (which we will discuss later).

If you are using blank stationery for business, with no preprinted letterhead, you should type your address (and telephone if you like) at the top of your first page. You may either center it or put it flush to one side. Do not type your name; save that for the **Complimentary Close.**

2. **The Date**

Type the date below the letterhead. Depending on the letter style you choose, it can be flush to one side or centered. Whatever the case, the following rules apply:

a. The date is typed two lines below the letterhead.

b. The name of the month is typed in full.

c. The day of the month is separated by a comma from the year. For example: January 12, 1987.

3. **The Inside Address**

This address is typed in full, including the name and title of the person to whom you are writing. This address should be similar to what will be typed on the envelope. The title may be placed on the same line as the person's name such as:

Phil Samson, Chairman

Or on the next line:

Phil Samson
Chairman

If the company address takes up more than two or three lines, you might want to put the title and name on the same line, just to keep the address from taking up too much space. On the other hand, if Phil's title were long, such as: "Assistant Manage Product Storage, Retrieval and Development, Section II-IA," you might want to separate things out to keep the address neat:

Phil Samson
Assistant Manager,
Product Storage, Retrieval
and Development, Section II-IA

The point is to keep everything clear and easy to read.

The company address goes under the company name. If it is too long, follow the same procedure as with the title:

Phil Samson
Chairman
The Great Midwestern, Atlantic
and Pacific Insurance Cartel, Inc.

The street address is typed below the name and title. Again, simply type what is going to be on the envelope. Here are a few guidelines:

a. Use numbers for all buildings except **One** (as in "One Toolworks Plaza")
b. Use numbers for streets, avenue, etc. above **Ten.**
c. Write out directions such as **North, South.** Abbreviate city directions such as **Northeast** as **NE**

Type the city, state and zip code beneath the street address. Abbreviate the names of states longer than five letters. Learn their correct abbreviations.

Between the last address line and the **Salutation,** there may be a line that directs the letter immediately to one specific person or department. Or, it may tell the addressee what your letter is about. This line follows one blank line under the address and is followed by a blank line before the salutation. This attention or "re" line may be flushed left, indented or centered on the page. Here is an example of each:

Phil Samson
Chairman
Bank of America
6900 Melrose Ave.
Los Angeles, CA 90035

Attn: Accounts Receivable

Bank of America
6900 Melrose Ave.
Los Angeles, CA 90035

Re: Up-dated deposit procedure

4. **The Salutation**

If you know the person to whom you are writing, the salutation generally begins: "Dear.....," And if you know the person well, you may of course use his or her first name. If you do not, you might put "Dear Mr. or Ms. ....," or perhaps a generic "Dear Sir or Madam," without mentioning a name at all. In any event, be graceful; do not assume any familiarity.

5. **The Body of the Letter**

Your letter should be typed single-spaced and organized into paragraphs. Depending on the style of your particular letter (we will discuss this later), the first line of each paragraph will either be indented five spaces or flush left. In any case, you should double space between paragraphs.

6. **The Complimentary Close**

The words you use to close your letter should reflect the impression you wish to leave with your reader. "Regards," "Very truly yours" and "Sincerely" are the usual endings, but you may choose some other closing with which you are more comfortable. Beware, though, that silly endings such as "Grudgingly yours" and the like rarely achieve the positive effect you may intend. When in doubt, stick to something a little more formal.

Following the closing, skip four lines and type your name, or the name of the person who has written, and thus will be signing, the letter.

7. **The Reference**

References are typed several lines down from the signature, depending upon space available. They may tell the addressee who wrote and then who typed the letter. In this example Ruth Bronson typed a letter for her employer, Phil Samson:

PS:rb

References can indicate enclosures (attached pages) in a letter. Here are three ways of stating this enclosure:

Enc. Enc. (5) Enclosure

They can also designate who also received copies of your letter:

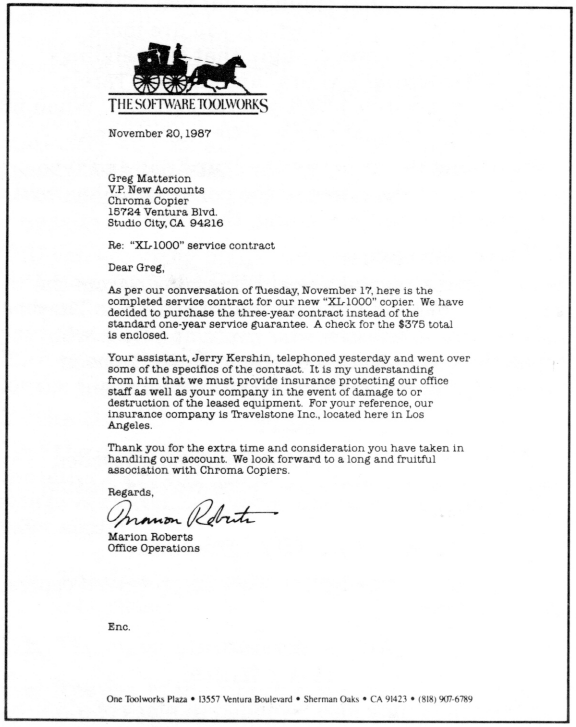
c.c.: Jack Remme
Mary White

Postscripts may also be added in place of a reference.

P.S. Your immediate reply is urgently awaited, Phil.

THE FOUR LETTER FORMS

Most traditional business or personal letter styles can be broken down into two basic types: Block and Indented. Here are illustrations of the four most common forms:



THE SOFTWARE TOOLWORKS

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Thank you for the extra time and consideration you have taken in handling our account. We look forward to a long and fruitful association with Chroma Copiers.

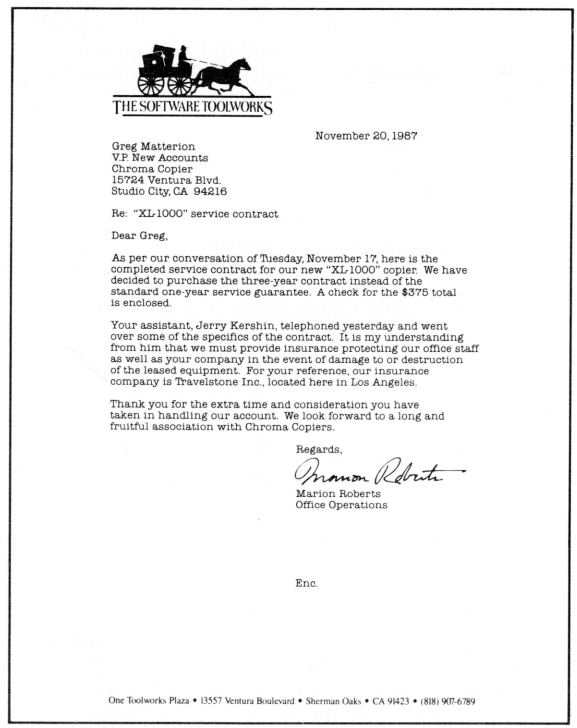
Regards,

Marion Roberts
Office Operations

Enc.

One Toolworks Plaza • 13557 Ventura Boulevard • Sherman Oaks • CA 91423 • (818) 907-6789

Full Block Style, (Fig. No. 1)



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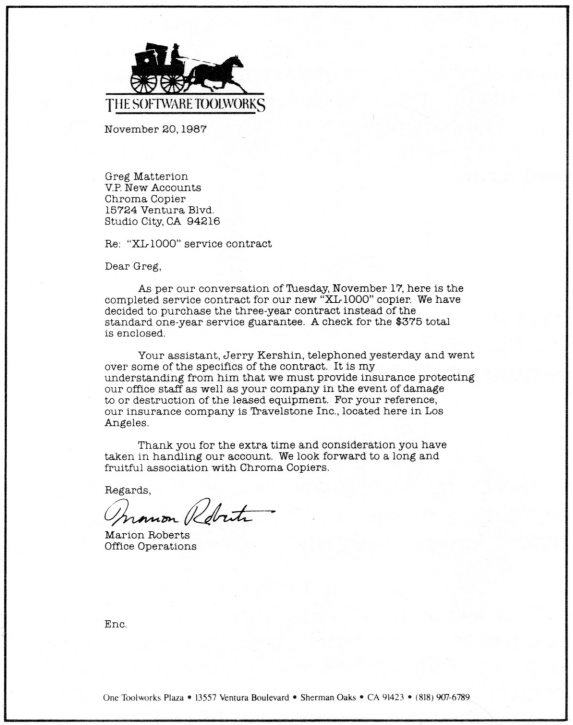
Standard Block Style, (Fig. No. 2)

Let's talk about the **Full Block Style** (Fig. No. 1) first. In this style, all elements, the **Originating Address, Date,** the **Inside Address, Salutation, Body of the Letter, Complimentary Close** and **Reference,** are typed from the extreme left margin. The paragraphs are not indented. This type is the most formal of business approaches.

The **Standard Block Style** (Fig. No. 2) continues with all elements flush to the left, with the exception of the **Date,** the **Complimentary Close** and the **Reference.** These begin at the center of the page. This style, while not quite as rigid as the **Full Block,** is still very formal.

The **Semiblock Style** (Fig. No. 3) is perhaps the most common of these four styles. The **Semiblock** keeps all elements flushed to the left, except the first line of every paragraph which it indents five spaces. The indentation is usually created by setting the 'Tab Key' to this spot.

Finally, the **Indented Style** (Fig. No. 4) continues to indent the first lines of the main body paragraphs. This formula for business correspondence is probably the most stylized of the four and is the least often used. It is currently considered somewhat more difficult to read. However, styles change with time and so it is included here. The **Indented** indents the **Inside Address** at the



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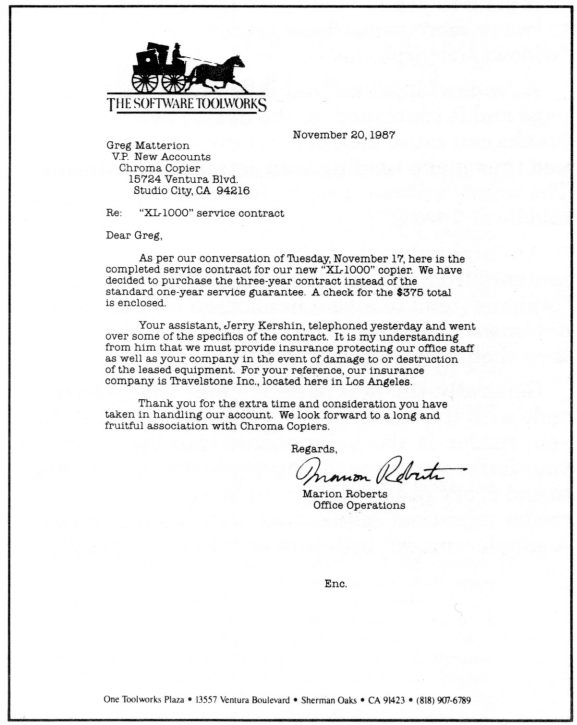
Semiblock Style, (Fig. No. 3)



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Indented Style, (Fig. No. 4)

left margin as well, with each subsequent line in this address also indented to the right of the one above:

Phil Samson
Chairman
Bank of America
6890 Melrose Ave.
Los Angeles, CA 90035

The signature line, too, is indented to the right of the **Complimentary Close:**

Very truly yours,

Mary White

So far, we have only spoken about one-page letters. Often, however, you will be constructing multiple-page documents. The following are some general guidelines that will help you create the clearest presentation possible.

Working on a typewriter allows a more immediate check of your page set-up because you are creating your final document as you go. Word processors, by their nature, don't offer such immediacy. So, before you print out your piece, it's a good idea to preview your work. As with a single-page letter, the look and organization of a letter with many pages is vital. Too many lines on a page or poorly chosen

page breaks can take the edge off an otherwise fine work. Most word processors allow you to check how your piece will print so that you can adjust page breaks, etc. Make it a habit to do so.

It is up to you to make sure letters which extend to two or more pages do so gracefully, without "widows" or "orphans."

A "widow" is a line that falls at the end of one page and is continued on the next. These line breaks can cause lack of continuity in your work and thus make reading your letter more difficult. The worst "widows" break off with a hyphen in the middle of a word.

An "orphan" is the balance of the "widowed" sentence from the previous page. "Widows" and "orphans" tend to give a haphazard look to your document and while they are technically correct, they should be avoided.

Generally, the first page of a multi-page letter ends with the word "(more)." This is a courtesy to your reader. It also helps ensure that the balance of your letter will be read. Since you will be striving to end every page with a complete sentence, a reader might not realize that your letter continues. A simple "(more)" tells him or her that it does.

The following pages of your letter may or may not be numbered. Standard business procedure allows that a simple "Page 2," etc. should go on the top left corner of the page. You might also add the name of your addressee and the date of your letter, to identify the page in case it becomes separated from the first. The top margins of the subsequent pages of your letter can vary in size. Generally, they should start 6 lines down from the top of the page. The body of the letter should then commence 4 lines below this. Styles do vary but here is a standard form:

} 6 lines

Page 2
Mr. Phil Samson
January 1, 1987

} 4 lines

We are continuing to review the night deposit procedures and will present the full report at our meeting...

This section only briefly touches on the basic business or formal letter styles possible, and the examples provided here are only some of the possible formats. The fundamental idea is to remember that, while letter styles may go in and out of fashion, a clear, uncluttered page layout will never let you down.

"I made my first appearance at the Patriarchs' ball."

"There were all sorts and conditions of men."

"I am coming to speak to your mother to-morrow."

THE STORY OF A SOCIETY GIRL

TOLD BY HERSELF

The typewriter manufacturers quickly spotted a great, relatively untapped reservoir of cheap help. The textile industry and the canneries had already tapped it: women! Prior to the 1870's, women really had only three career choices: teaching, nursing and homemaking. Teaching and nursing were low paid jobs considered the place for plain spinsters unable to find a husband but who had to eke out a living somehow or be gainfully employed since they would never have a home of their own. The main role for women before the turn of the century was to run a household--hopefully for a man with money and significance. The main task for the young woman was to find that right man.

The Ladies Home Journal in December, 1890, described in THE STORY OF A SOCIETY GIRL the 'ideal' role of the young woman as hoped for or imagined by many young women at the turn of the century: 'At eighteen years of age I was brought out; but for three months before that my mother had taught me exactly who among the men were eligible, who were not, what women were to be cultivated, what ones to be civil to and what ones to ignore. I made my first appearance at the Patriarchs Ball, and mamma very wisely had me dressed in the finest of white silk muslin, made in Empire style, with a broad sash about my waist and a white rose in my hair, and long, white gloves. As was proper, I accepted the invitations to dance from the elderly men, from whom it was a compliment to receive them, and, as far as possible, I ignored the younger ones.'

'I sought mamma's wing at the end of each dance, and, to her delight, the impression left on everybody's mind was that of my being an extremely beautiful, ingenuous, young girl who knew nothing whatever about society. How they erred! I looked at Mrs. August Belmont's sapphires and thought that when I was a matron, I would have ones just as handsome. I stared, politely of course, at Mrs. Marshall's beautiful pearls and wondered why they should be wasted on a widow. The next day the newspapers were full of descriptions of the new beauty, and before I knew it, the sweet, childlike look in my face had gained for me the title of 'Baby.' When proposals of marriage began to pour in upon me; I had concluded exactly who I would marry--the rich, and only son of a rich man . . . . .'

Pre-typing career choice?

The Resume Writer

Mavis would like to help you advance your career. When you're looking for work, you'll probably begin by sending your resume to potential employers. This piece of paper is the first time your prospective employer will see "you." It is, in effect, his or her first impression of you. Mavis will help you make it a good one!

Employers receive numerous resumes. Let's make sure that yours is outstanding! Whatever your level, from summer "part-timer" to school graduate at the beginning of your career, Mavis Beacon's "Resume Writer" will help you achieve your goal.

Mavis helps you organize your information (probably the most difficult step). You'll be able to decide what work experience to emphasize and which skills to include. You'll create the resume that best represents you, one that gets you the job you want. Mavis Beacon asks all the right questions —it's as easy as "fill in the blanks!" Once you provide the necessary information, Mavis formats it. You can either save the information and look it over later (not a bad idea—it sometimes helps to read over what you've done with a "fresh" eye), or save your resume to a file and edit it with your word processor.

Mavis will help you design your resume with these key elements in mind:

Your contact information:

Name
Address
Home and work telephone numbers

A Job Objective	(used at entry levels or if you are changing careers)
Your Employment History	(your most recent job first)
Your Educational History	(again, most recent school first)
Your Special Skills	(such as office skills, languages and sports at which you might excel)
Military Service	(if any)

The key to writing an effective resume can be summed up in three categories: brevity, accuracy and appearance.

Brevity: It may seem difficult, but it's a good idea to fit your entire resume onto one page. Some jobs require extra technical information and these might stretch a resume to two pages, but you should at least try for a single page. If you do go to two, make sure that there's a good reason.

Mavis will help you keep your resume short by designating "fields" or areas for you to fill in. It's easy once you begin. At first, try leaving out all of the extra words like "the" and "a." Some abbreviation is fine, as long as it's clear. Writing a resume is like writing a telegram: every word counts!

Here's an example. Instead of writing:

> Advertising Assistant: I worked for the Bullock's department stores chain in the advertising department. This department coordinated advertising for the entire 18-store chain. My job was to set up a new filing system for art work, send out and receive photo negatives for up-coming ads and proofread copy for these ads.

You might try shortening it to:

> Advertising Assistant: Worked in Bullock's 18-store chain advertising dept. Responsibilities included revamping art work filing system, coordinating traffic for all ad photos and proofreading advertising copy.

Remember: Stress your accomplishments!

Accuracy: A lot of us feel that we haven't "done" enough. When we try to put together our resumes, the temptation to stretch the truth sometimes exists. Don't give in. It is unwise—what happens if you get caught? You might lose a job you would have gotten just because you didn't tell the truth!

Often we are our own worst critics. This tendency sometimes surfaces when we try to write about ourselves. Many people look at what they've done and cut out what could be the most important or interesting aspects!

Record all relevant job experience. Just because you didn't get paid for working on the hospital fund drive doesn't mean you didn't display the kinds of qualities for which your potential employer is

looking. Did you arrive on time? Take over responsibilities? Make things happen? These are things that will be important in your next job.

Appearance: Mavis displays your information in the clearest resume format. Working with Mavis Beacon, you will quickly find your facts neatly set out on your screen or, should you print it, on a sheet of paper. However, should you want to "play" with the work you two have done, simply put your resume into a file and work with it. Always remember, simple and clear is better than fancy and long. The point of your resume is to present the best of you.

Here is a sample of the Mavis Resume Format:

Jill Hansen
1212 Third St.
Sacramento, CA 95816
Home phone: (916) 456-7892

Employment History

From 6/86
To Present

Administrative Assistant, Los Angeles Times
Times Mirror Square
Los Angeles, CA 90025
(213) 972-7400

Worked directly with Editor of Business Section. Set up new filing system for press releases. Fielded heavy telephone correspondence from foreign editors.

From 5/86
To 6/86

Intern, Hilton Hotels, Inc.
6998 Sunset Blvd.
Los Angeles, CA 90045
(213) 850-7800

Wrote press releases. Handled press contacts for seasonal promotions. Assisted in all public relations activities.

Educational History

From 9/82
To 6/86

UCLA
One Westwood Blvd.
Los Angeles, CA 90024
B.A. Communications

Special Skills

Typing 60 WPM
Fluent French
Tournament Tennis Player

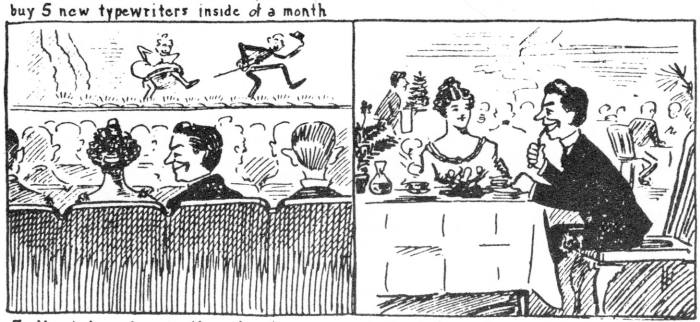
NOTE: Jill didn't have any military service, so Mavis left out this category. Also, Jill has completed college, so she doesn't need to put her high school information down.

THE EDUCATION OF TYPEWRITER BILL.

He thought friendship meant business.

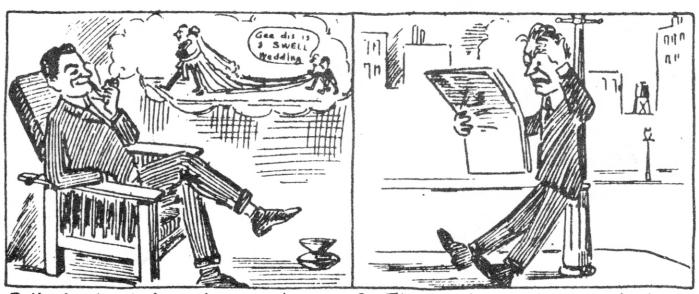
1. He meets a pretty typist (Miss Peachy) in Mr Jones office - - Jones expects to buy 5 new typewriters inside of a month

2. He brings her a box of candy.



3. He takes her to the theatre.

4 He takes her out to lunch.



5. He begins to have pleasant pipe dreams - - -

6. Then - - he reads that she is engaged to Jim Remington, salesman for the Underwood Co.

Turn of the Century Sales Incentive

The Theory Behind Mavis

"Mavis Beacon Teaches Typing" is the finest typing program in the history of microcomputing. It has elaborate graphics and sound, interesting and varied texts on which to practice, and an astounding number of features, all packaged up in an easy and fun to use program.

But this program is more than merely a bunch of great graphics and fabulous features. At its core is an expert system specifically designed to teach typing. This section explains how this artificial intelligence works. It is not necessary for you to understand how the program "thinks" to use it, but when Mavis begins to make her suggestions you may find it interesting to know how she comes up with them.

Typing seems like it should be easy. All you have to do is make your fingers hit the keys. Nothing could be simpler, right? In fact, typing is a complex skill bringing together motor and cognitive functions that often have a difficult time cooperating. The best typing teachers know this, and they will note when their students begin to show the characteristic error patterns or substantial speed increases or decreases that signal the need for a new set of lessons. "Mavis Beacon Teaches Typing" does the same thing. The trick, of course, lies in incorporating this human knowledge into a computer program. Here, in rough outline, is how it works.

Script Files

When Mavis first meets a user, and until she has enough typing and other response data to start making intelligent analyses and recommendations, both her recommendations and her lesson generation are driven from prestored data. Like a computer chess program in the early going, the program plays from "book." Rather than introduce special case algorithms, we just store some precomputed responses. After Mavis has had a chance to analyze a short representative sample of your typing, she will begin to prepare tailored lessons.

The first thing Mavis does is analyze the results of previous lessons for speed and accuracy per key. Then Mavis determines which keys to drill using a special formula to determine key "hot spots." This calculation examines all keys, giving extra weight to those keys that occurred in the current lesson, proportional weight to characters as they occur in common English usage, and an inverse weight based upon the frequency of use in the lessons Mavis has so far prepared for the user. This complex calculation is done because:

1. Mavis wants to emphasize keys the student has worked with a lot this lesson. Mavis always has a goal "in mind" at the beginning of a session. This goal is related to the historical progress of the student, with the by-product being (since there is no current session data) starting lessons focusing on certain keys and patterns. By emphasizing the current session, these keys are emphasized for the remainder of the session and the typist recognizes that the goal is being worked toward.

2. Mavis cares about the keys in proportion to their frequency in common English usage. If a typist types the letter Z half as fast as the letter S, but S occurs three times more frequently than Z, the letter S needs the most work, not Z. All other typing programs ignore this simple fact and quiz letters out of proportion to their importance in actual daily typing tasks.

3. On the other hand, Mavis wants to make sure that all keys are covered. So, she keeps track of all the keys she has included in her lessons, builds a frequency table, and biases the choice in favor of keys that haven't been practiced much.

These three criteria are in fact contradictory (as often happens when humans need to make decisions), but the rules used mediate between them and everything ultimately balances out. Only a computer can handle these calculations in reasonable time because they require fancy record keeping and the ability to monitor split-second differences in keystroke interval times for all keys typed.

The Analysis Phase

After Mavis has determined the keys on which she is going to focus, she tries to determine how to build lessons to correct the problem. To do this, she first analyzes the results of the lesson for many kinds of errors and statistics like speed and accuracy per key, number of keys needed before catching an error and backing up, the transition rate to and from a given key, dropped keys, doubled keys,

transpositions, a hit that is the right row, but the wrong finger, or is the right column but the wrong key, overlapping errors (typing between two keys instead of on one), mirror image (correct row and column but wrong hand), 'Shift Key' problems or any other kind of consistent mis-hitting problem. There are about thirty categories to begin with. The program also has the ability to generate entirely new categories, using its sophisticated pattern recognition capabilities. Each of these statistics is maintained for each key.

Next, the program groups the results into several "compositional" categories according to the statistic's relation to any finger, row, column, hand or keytype. These results update the current session history.

Hot Keys

After the basic analysis is complete, Mavis scans to locate letters with the highest "hot key" rating. She identifies extremely faulty keys using a standard statistical analysis that rates the importance of any key by its overall contribution to the speed/error matrix.

Next Mavis totals across the rows for keystroking errors in those columns that match her selected "hot keys." These totals are adjusted by the frequency the category has been used as a contributing factor in determining previous lessons and by a preference weighting based upon our research into the causes, and importance, of each kind of error. Then the totals are compared to determine if there are any obvious error types. If there is a standout, it is set aside. There may not be any obvious error patterns, in which case an alternate lesson construction method is used.

Compositional Errors

If there are no statistically significant error types, Mavis looks for "descriptive" errors. She looks to see if errors can be categorized by finger, row, hand or character type (punctuation, numerics, alphas, etc.). If there are statistically significant variances detected for these categories, lessons will be built to match. If Mavis still cannot locate any particular category, she creates a "no category" lesson.

Other Justifications for a Lesson

In addition to this two-phase analysis, there are other factors that affect lesson choice. Mavis Beacon tries hard to avoid repetition. She is always against doing a primary lesson type at too closely spaced an interval. If the factors weighing in favor of repeating a lesson type are very strong, Mavis will probably still not allow it to repeat and instead predict that unless the typist shapes up, they will probably see this lesson again soon. Mavis is also concerned about the frustration factor. Sometimes the user gives up (escapes out of the lesson only partway through), fidgets (lots of pauses to change settings, or often does not accept the offered lesson), or just gets upset (Mavis sees lots of keystrokes coming through very fast, none of which are correct). At such points, Mavis may suggest playing a game, revising the target speed goal or even calling it a day. Mavis also keeps account of the ratio of drills to games and whether the user continually requests the game. If so, she adjusts the ratio to match, just as a good human teacher would.

Lesson Templates

Each error type has one or more associated general lesson "templates" which are lists of rules specifying an appropriate response in general terms. This pattern of lesson options may be moderated by outside factors (for instance, a lesson pattern may call for a lesson built of phrases. For a child, the

phrases we will use are jokes and riddles whereas for an adult, we might choose the *Guinness Book of World Records),* but otherwise it can be thought of as the "one best" remedy for the error encountered.

Each template also has a list of Mavis "lesson descriptions" associated with it. These descriptions essentially provide the words Mavis uses to rationalize her lesson choices.

The Stuff of a Lesson

The components Mavis has at her disposal to create a lesson are huge: Mavis can prepare her lessons from her extensive database of words. When she does this she can optimize on words containing certain characters or certain patterns or both. Alternatively, Mavis can draw from her data base of interesting sayings, facts, riddles and jokes. Additionally, she can access many prepared lessons to test special skills like ten-key typing, business correspondence, and so forth. Lessons using the five hundred most common words in English can be created. Left hand, right hand and "typing hurdles" lessons can also be generated.

Furthermore, Mavis can take any one of these lessons and vary it greatly by changing its format. For instance, so long as the user hasn't requested otherwise, she might change any of the screen features like the metronome, clock, cursor, moving hands, and LED's. Mavis also can turn any lesson into a "Barrier Typing" lesson, where only the next few characters (about one second's worth at the current average typing speed) of the lesson are shown to the typist. This keeps the typist from reading too far ahead and emphasizes the notion of grouping characters into commonly occurring chunks. Mavis can allow the user to make multiple errors per key or force them on after the letters are displayed in alternative colors to signal that the pattern must *all* be typed correctly or the typist is set back to the beginning of the pattern. She can offer "speed" and "accuracy" lessons in which accuracy or speed (respectively) of the typing is not recorded as part of the user's permanent record. She can vary the length of the lesson. And, of course, Mavis at any time can always suggest a road race through the rugged Wyoming countryside.

Building the Lesson

After choosing the lesson type and format, Mavis's next job is to create the actual lesson. As earlier discussed, each error type has an associated set of remedies and each remedy has a set of responses. Mavis chooses a "least recently used" remedy selection and from the information contained there prepares the lesson. Depending on the typing situation, Mavis might either read in a completely prepared lesson and present it in the appropriate way ("Barrier Typing," perhaps), create a lesson based upon the phrase database at her disposal, or create a lesson based upon words and common letter patterns.

Explain The Choice

Mavis is also required to explain her approach. Associated with each typing situation is a "file" of phrases. There are similar files of phrases associated with other attributes that can make their way into a lesson (such as a prediction). Mavis chooses a phrase from each of these files, splices them together following certain rules of English and prints the result out on the chalkboard. If the user requested verbose mode off, Mavis will limit her speech to a simple recounting of the lesson outline.

The Speed-Typing Alternative ...The Dvorak Keyboard

If you were in a rush to get somewhere, would you dash to your car, rev up the engine and step on the brake? If you wanted to look really sharp, would you dress in the dark? If you had a letter to write, would you tie your hands behind your back? As ridiculous as all of that sounds, it's no more ridiculous than typing on a typewriter keyboard that was *designed* to slow you down!

People type to save time. Yet the QWERTY keyboard that most of us use today was planned to hold us back.

In 1872, Charles Latham Sholes and his co-inventors created the first popular American typewriter. Sholes was generally pleased with his machine but ran into one significant problem. No matter how hard he and his engineers tried, they couldn't type at any acceptable speed without the typewriter keys jamming.

Since the machine couldn't be altered to accommodate the typist, Sholes, decided to slow the *typist* down to accommodate the machine. Therefore, the inventor spent many hours devising the most awkward, inconvenient arrangement of the typewriter keys possible. Finally, Sholes settled on what he called his QWERTY keyboard (named for the first six letters on the typewriter's third row). The name was also chosen as an advertising stunt to remind people that the word "typewriter" could be typed without leaving this row. With the QWERTY keyboard, Sholes felt sure that even the fastest typist would be slowed sufficiently to use his typewriter.

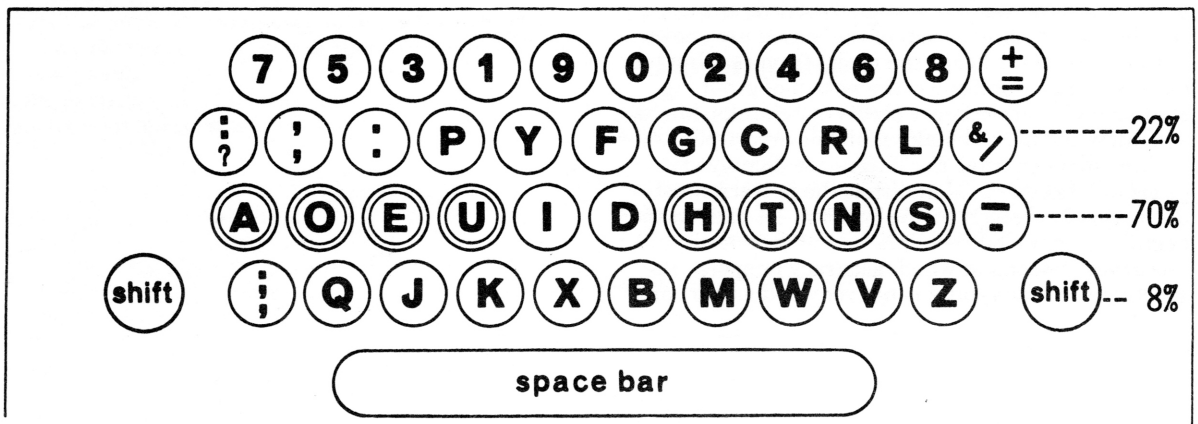
Today we work on fast-paced computers with capabilities never dreamed of by Sholes and his friends. Yet, we still use a keyboard that he designed over 100 years ago to correct faulty machinery that no longer exists.

Of the several attempts made at changing the typewriter's key arrangement, only one had any impact on the evolution of typewriter design. It was the work of efficiency expert August Dvorak and former college professor, William L. Dealey.

Like Sholes, Dvorak and his colleague also studied the English language, but not for common letter patterns to separate and thus slow the typist down. Dvorak and Dealey examined the English language with the express purpose of determining the optimal placement of letters on the keyboard.

Through their work, Dvorak and Dealey succeeded in pinpointing the major errors in the QWERTY keyboard. They found that the QWERTY keyboard forced the typist to move his or her fingers

Dvorak Keyboard: 1936



in awkward patterns to construct even the simplest words. Further, they found that the typist's weaker fingers (and the generally weaker left hand) were given the majority of the work. Stronger fingers and the stronger right hand remained underused. The Dvorak and Dealey design fixed all that.

Because of their work, the Dvorak keyboard allows 70% of all typing tasks to be performed without lifting the fingers up or down from the second or "Home Row." As a result, almost 3,000 words can be typed on the Dvorak "Home Row," while a mere 120 can be constructed from the QWERTY home base.

In 1936 they patented the Dvorak keyboard. With it, they were able to increase accuracy in typing by almost 50% and speed by 15–20%!

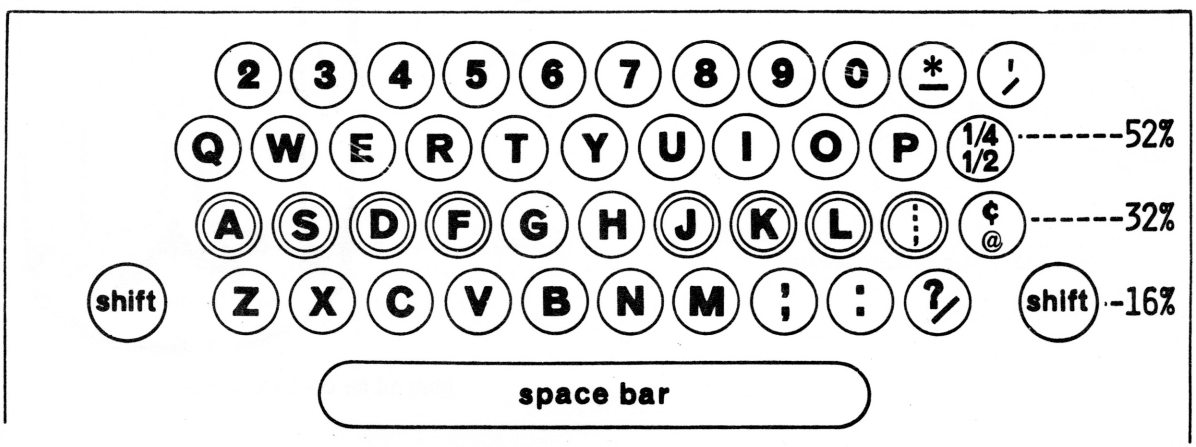
Additionally, the Dvorak arrangement reduces the amount of effort needed to complete large typing projects. Studies show that in an average eight-hour day, a typist's fingers travel about sixteen miles on a QWERTY keyboard. In the same day, a Dvorak typist's fingers travel about one mile. Furthermore, average learning time on the Dvorak has been found to take around 20 hours, less than one-third the time it takes the usual QWERTY newcomer!

With all of its obvious advantages, one might expect the Dvorak keyboard to have swept the nation at once. But it didn't. The initial trouble faced by the Dvorak keyboard had as much to do with bad timing as anything else.

Dvorak developed his keyboard in the middle of America's great depression of the 1930's. As an efficiency expert, he saw that businesses needed typing, but couldn't afford to pay many typists. Dvorak proclaimed that a single competent typist using his system could do the work of at least two typists using QWERTY keyboards. As a model of office efficiency, this was a godsend. But to an American public that was already looking at astronomical unemployment figures, Dvorak's plan fell on deaf ears.

Not one to quit, Dvorak jumped on the bandwagon when Remington announced its new "silent" typewriter. The machine's silent efficiency drew the inventor. However, the public had no interest in silence while typing. Without the familiar clackity-clack of the keys, a typist had no way of knowing if any letters actually struck the paper. On top of this, people were simply used to the standard QWERTY keyboard. Slow or fast, it felt like home. And the Dvorak arrangement fell into relative obscurity.

Sholes Keyboard: 1872

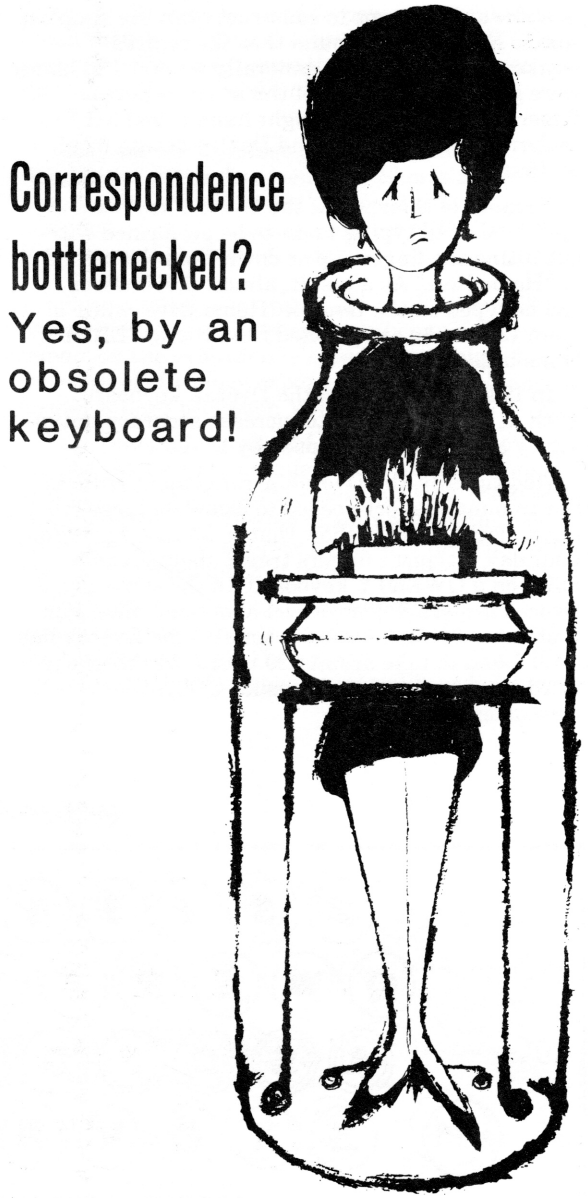


It wasn't until 1978 that the Dvorak system came to life again. At that time, a group of Oregon-based enthusiasts formed Dvorak International to promote use of the keyboard.

Headed by Virginia Russell, this company has reintroduced the Dvorak system into the workplace. Companies such as Bell Communications, DuPont, Aetna Institute for Corporate Communication and a handful of Fortune 500 companies make use of the Dvorak keyboard in many of their operations. It may be an uphill battle; over the years people have become wedded to QWERTY. But the popularity of the Dvorak keyboard is growing.

If you would like to learn the Dvorak method, Mavis Beacon is here to help. Once you select the Dvorak keyboard from your option menu, you'll see the new arrangement on your screen, and your computer keyboard will automatically be set to the Dvorak arrangement.

For sources of accessories and software that will help you use the Dvorak method on your computer, see the following list:



1960 Ad for the Dvorak Keyboard

MACQWERTY $35.00
Paragon Courseware
4954 Sun Valley Road
Delmar, CA 92014
(619) 481-1477
Reconfigures the Macintosh keyboard to the Dvorak.

MAGIC KEYBOARD
Southern California Research Group
Box 593
Moorpark, CA 93021
(213) 685-1931
Firmware for the Apple II conversion to Dvorak.

FAULTLINE MICRO $21.58
Box 3147
Fullerton, CA 92634
(714) 526-5055
Toggle conversion and overlays Apple IIe

FAULTLINE MICRO $10.50
(Same as above)
Keycap overlays for the Macintosh
Printing in black and white

SWITCH TO DVORAK $25.00
Box 162
Cape Canaveral, FL 32928
(305) 784-1541
Toggle conversion for Apple IIe

HOOLEON KEYBOARD OVERLAYS $26.95
Hooleon Corporation
Box 201, Page Springs Road
Cornville, AZ 86325
(602) 634-4503
Dual marked overlays for all computers in red and black.

ACUTYPE $24.95
Acu Business System
819 West 6th Street
Winona, MN 55987
(507) 452-4887
Dvorak International's highest recommendation for toggling between Dvorak and QWERTY for IBM and compatibles.

RADIO SHACK MODEL 100 $24.95
TRI-MIKE
33 Virginia Drive
Apt. 22
Monroe, MI 48161
(313) 242-9693
Converts Radio Shack to Dvorak.

DV SWITCHER $39.95
Prelco
14292 Galy Street
Tustin, CA 92688
(714) 544-3041
ROM kit for Commodore 64

KEYTRONIC IBM KEYBOARD $256.00
Box 14687
Spokane, WA 99214
(509) 928-8000
Keyboard for the IBM PC and the first on the market with Dvorak.

KEYTRONIC $33.50
K T Services Inc.
Box 14528, MS-101
Spokane, WA 99214
(800) 262-6006 ext. 395
(509) 927-5395
Conversion kit for KB-5150, KB-5151, KB-5151 AT
Will work on Zenith 148 and 150

MAXISWITCH IBM KEYBOARD $150.00
9697 East River Road
Minneapolis, MN 55433
(612) 755-7660
Keyboard for both IBM PC and AT. A keytronic clone. Dvorak recommends this as an excellent board.

BIBLIOGRAPHY for Dvorak articles $20.00
Dvorak International
Box 128
Brandon, VT 85733
(802) 247-6020
From 1922 to present.
Over 200 entries (including books)

For Practice

Exercise 1

At certain times in your work with Mavis, she will give you some practice text to type from your manual. Here it is!

Typing while looking at another page can be a real challenge! However, in offices all across the country, this is what is expected of a typist. Once you master the technique, it's not only a challenge, but also a lot of fun. You are handed a messy, scratched-out, handwritten scrap of paper that must be sent to your boss' business associate.

A lot is riding on this letter and everything depends on you! There is a sense of pride a good typist feels in creating a beautifully typed, finished letter or report (especially when he or she saw that "messy scrap" of paper that originally contained the information)!

So, while the learning might go slowly and the road seem a long one as you begin to type, always remember that this skill will make a great difference in your future. Whether you will be typing office work, essays for school or merely correspondence for yourself, your skill at typing will increase your productivity while it perfects the presentation of your work.

Exercise 2

Samantha loved her birthday. It was on Halloween! This year she invited her entire class.

Her birthday cake was going to be a giant orange cake shaped like a jack o' lantern. They were going to play "Pin the Sheet on the Ghost" and eat candied apples! But what costume should she wear? She thought and thought. Her birthday got closer. Finally, her birthday was the next day. She still had no ideas!

Her mother and father helped her think. Did she want to be a princess? A clown? A fairy? No, none of those ideas was just right. Finally, when Samantha was getting very sad, her cat Collette jumped in her lap.

Suddenly Samantha knew what she would be! And at her birthday party the next day, Samantha did indeed have the best costume. Her costume had two little black ears, white fuzzy whiskers and a long black tail! What was she?

Exercise 3

How you dress can say quite a bit about you. This fact couldn't be more appropriate when you begin a job search. Remember, the person interviewing you is trying to get to know as much about you as possible in a very short amount of time, sometimes in one half hour or less. He or she is looking closely at every detail about you to help him or her make the final decision about whether you will be right for the job. And although a career will not be won or lost based on your style of dress, it helps to put the best foot forward in this area.

Generally, if you have a question about an outfit, don't wear it. In most cases a more traditional "look" is the wisest choice. A clean, crisp appearance is always better than sporting the latest fashion craze.

Whether you choose a skirt, dress or pants (for women, of course!) or a coat and tie or suit (for men), make sure that these clothes are freshly cleaned and pressed and that the colors are flattering to you. A fresh, uncluttered appearance might well give the indication that you perform fresh, uncluttered work. This theory might sound silly or strange, but think how many times you have judged someone by how he or she is dressed. ("Oh, he was just wearing old tennis shoes and ugly shorts!") So, next time you head out the door to meet someone important, stop by the mirror and give yourself the once-over!

Exercise 4

To: All Employees
From: E. A. Henrickson, President/CEO
Date: June 29, 1987
Re: 4th of July Picnic

Miriam Hortence, our Director of Promotions, has really outdone herself this year in planning the annual 4th of July company picnic. This year the event will be held in Will Rogers State Park at 14097 Sunset Blvd., just east of the San Diego Freeway. This will be a "Ho Down Western-Style" BBQ and Square Dance. All employees are encouraged to come in Western attire and Square Dance finery. The fun will begin at 12:00 noon, Wednesday, July 3rd until sunset that day. You need not come to work that morning.

I look forward to seeing all of you at the event. Coming off of our yearly inventory, we all certainly need the relaxation! I also feel that this "fun fest" will be an appropriate way to thank each and every one of you for the fine job you have done this period. We exceeded our preinventory goal with a 14% net increase in sales!

And I would also like to invite you all to take Thursday, July 4th (of course) and Friday, July 5th off as well. We'll just call this our "Enco Electronics 5-Day Week-end!" Thank you all very much and...see ya there, partner!

Exercise 5

Mr. Lawrence Nigel
President
Advertising Creations
1478 23rd Ave. NE
San Francisco, CA 94586

Dear Mr. Nigel,

I was struck by your ad in the San Francisco Examiner this week.

The position of Account Assistant that you are offering seems the perfect combination of what I am now doing and the career I would like to pursue. As you can see by my enclosed resume, I currently work as a Public Relations Assistant for La Cuisine Luxe, a small gourmet foods company. We supply all the pastries and elegant picnic items for the specialty food shops in I. Magnin and Saks Fifth Avenue department stores.

As I know your firm specializes in food and beverage advertising, I feel certain that my expertise in this area coupled with my drive to enter the field of advertising make me an attractive addition to your company.

I will follow this letter with a phone call later this week so that we might arrange an interview time.

Regards,

Exercise 6

Mrs. Douglas Hennesy
1890 45th St. NW
Sacramento, CA 95816

Dear Mrs. Hennesy,

As a Berkton's Department Store preferred customer, you are eligible for entry into our "Hawaiian Get-Away For Two!" And all you have to do is come to our "Perfect Beauty" Care Salon on the third floor and pick up your free gift.

Throughout the year, we here at Berkton's have appreciated your patronage. You saw us through those long winter months of our Care Salon renovation as well as the "face lift" we've given to our Cosmetics Department! That's why we want to help you get away from it all for a Hawaiian vacation! And to make the wait for your winning ticket all the more pleasurable, we'd like to offer you a sample of our newest skin care line from Switzerland! Called "La Beaute Eternale," this series of amazing products makes skin care a delight!

So, just visit our "Perfect Beauty" Care Salon any time between the hours of 10:00 a.m. and 6:00 p.m., Monday through Saturday to pick up "La Beaute Eternale" care kit created just for you! And while you're there, register for your "Hawaiian Get-Away For Two."

Thank you again for being such a special customer to us. And see you in Hawaii!

Sincerely yours,

Corbin A. Smathers
Divisional Merchandise Manager

Exercise 7

Tara and Kelly didn't get along. It seemed that if Tara saw the glass "half full," Kelly saw it as "half empty." Even though they both went to junior high together, they avoided one another. And when they did meet, sparks would inevitably fly.

They had gotten along this way for most of the first year. And they might have gotten along that way the rest of the year, except that they both were elected to head the "Spring Beach Bash." Usually one person alone organized this party, but the votes were split. The minute the count was announced, Tara's heart stopped. Kelly wanted to cry. Each thought about letting the other take over. But when Denise Dell suggested that they jointly head the committee, they agreed. After all, neither of them was going to let the other have the last laugh.

The night before they were supposed to meet, Kelly sat down with her mom. She expressed her dread at working with Tara.

Her mother asked why she didn't resign. Kelly got angry. She didn't want Tara to have her way! Then her mother pointed out that both of them wanted control, both of them were being self-centered. Kelly knew she was right. She knew deep-down that she was being as egotistical as Tara. Kelly also knew that she would have to be the one to change.

So, the next day when Tara insisted that she wanted hot dogs or NOTHING at the party, Kelly smiled and said, "Sure." It wasn't much, but it was a beginning.

Exercise 8

Dear Friends,

I just wanted to thank you all for everything you have done for me over the past week. Not a day went by that someone from the office didn't come to visit me in that lonely hospital, call or send some thoughtful remembrance. I never knew that I had such a group of dear, devoted friends. They always say that rainy days bring out the best in the good people. But, believe me, my rainy days brought out the best in the best people.

They say having an appendix out is pretty painful, but I hardly felt a thing. Only my mouth smarted a little from smiling so much. Your little notes, those huge baskets of fruit, the lovely flowers and precious chocolates (the nurses loved those especially!) brightened my days and continue to shine in my thoughts.

I haven't said nearly enough, haven't yet touched on how wonderful you all made me feel. I owe each one of you more than I ever know how to repay. Thank you so. I look forward to giving each one of you a great, big hug the minute I return next week! Thank you again.

Your loving friend,

Exercise 9

You can really make a difference wherever you work. Not just because you will take care of a certain percentage of the office workload, but with your attitude as well. When surveyed, many employers ranked an employee's attitude as high as the amount of work he or she completed on a daily basis.

"Attitude" can be as simple as a smile and a cheery "Good Morning!" at the beginning of a work day. As simple as this sounds, you would be surprised at how few employees ignore this simple courtesy. Certainly, on not all days are you going to feel "on top of the world," but before you start taking out how you might feel on your employer or fellow employees, put the shoe on the other foot.

How would you feel if you were starting Monday about to type out an important report for your employer, and he bursts into the office with a sour look? He greets your "Good Morning!" with barely a grunt, slams his door and then buzzes you on the intercom. "HOLD ALL CALLS AND I MEAN IT!!" More than likely, you would feel hurt and perhaps even angry that he took his problems out on you. Of course what he is doing isn't fair, but he isn't thinking of being fair. He is only thinking of himself.

And that's the point. He is only thinking of himself. His anger toward you has not alleviated his problem, in fact it has made the day worse for you both. If he were to have thought of you and your feelings (especially since you probably had nothing to do with his "beginning of the week" ill humor), he might have swallowed his anger and greeted you in a more cordial manner.

The reason for his fury would still exist, certainly, but he would find in you a more willing aid, rather than an angered associate. You would naturally be more sympathetic to his problem and more willing to do anything you could to help.

This scenario, of course, can be reversed. You could be the angered one and your employer or other office staff be the recipients of your black mood. All the same advice applies. Try to keep your anger from influencing your work and work-related relationships. Put yourself in the other guy's shoes.

Exercise 10

Should you gain employment in an office as part of the office support staff, you may not always take part in the actual "business" of a business meeting, but your work is vital to its success. A secretary or administrative assistant who works closely with an executive in charge of such a meeting has an added amount of duties. And his or her employer will depend upon him or her taking charge of certain phases of the event.

The assistant's preparation for the conference might include offering alternatives for when and where the meeting will take place, confirming any guest speakers, checking that all who are expected to or desire to attend know the details necessary to do so and perhaps even helping prepare visual aids for the presentation.

It is during the meeting itself that the term "support staff" really comes to life. An efficient assistant is always ready to make sure this event comes off successfully. The duties here might include readying the hall or conference room (Do the people attending need paper? Pens? Individual pitchers of water?) and even greeting the guests as they arrive. The assistant should be ready to give an account of who attended.

Follow-up after the meeting depends upon the executive in charge. In addition to ensuring that the room or hall used is put back into its original condition, the assistant may be in charge of seeing to the further comfort of those who attended. Follow-up correspondence and a financial report of the meeting's expense are also jobs the assistant might be asked to undertake. As you can see, in business as well as architecture, without support, the "structure" will fall!

Exercise 11

Henry always wished he could fly. He would climb up to the top of his parents' apartment building in New York every night. The building was very high. And every night he imagined flying way over the tops of the city. Zoom! Swish! Sitting up there was beautiful.

But it was also dangerous. At least that's what his parents said. "What would happen if you fell?" they demanded. As punishment, Henry had to go to bed early for a week.

Henry was very angry. They had robbed him of his most favorite thing! He would show them. He would sprout wings that night and fly away! Boy, would they miss him then!! With all of these angry thoughts swirling around in his head, Henry went to sleep.

But he woke up soon because he couldn't get comfortable. His back itched. He reached around to scratch it and felt feathers! He had grown wings! Quickly, Henry opened his window and jumped out. He knew his wings would carry him. They did! It was better than he had ever dreamed. He saw Times Square, The Empire State Building and everything as if he were a bird!

Then, suddenly, one-by-one, his feathers fell out! Oh, no! Henry was falling! Thud. He hit ground.

Then Henry woke up. It had all been a dream. And he realized that the ground was the best place to be.

Exercise 12

Gentleman:

Thank you for sending me your winter catalog of camping equipment. Your prompt response will help me receive my new camping gear before our family 4th of July outing!

I would specifically like to order the "All Weather Wear" parka with "zip-outable" lining in a size medium in red. The stock number is: #4560021. I would also like to order your extra-thick thermal over-socks in a size small in blue. That order number is: #6731349.

Enclosed is a money order for a total of $53.15 plus 6.0% California sales tax and $3.50 postage and handling. My address is: 1234 East Vermont St./Los Angeles, CA/ 90027. I look forward to receiving my order and Happy (early) July 4th!

Regards,

Typing Error Glossary

Mavis Beacon examines every keystroke you make. Using over thirty different typing "yardsticks," the program maintains a constant analysis of your typing errors. Among these are nineteen specific error categories. The following glossary explains the terms Mavis uses.

ACCURACY (POOR): Your typing accuracy is not improving as it should, or is actually decreasing. There can be several reasons for this condition. Mavis will make specific suggestions for your improvement.

BACKSPACING: The 'Backspace Key,' hit once, takes your cursor back one space, over the last typed letter. Because backspacing requires a long reach from the "Home Row," Mavis Beacon watches for errors caused by that hand motion.

DOUBLED: This error occurs when you type a single character twice. For example, you might mistype the word " boat" as "boot."

DROPPED: A dropped letter error occurs when a letter in a word is left out, as when "omit" is typed "omt."

FINGER: Major typing errors can be traced to the keys struck by a single finger. An example would be if you had a weak left ring finger and consequently had trouble typing the W, S, 2, and X keys. Mavis will help you address this problem with lessons that center on your weak fingers.

HAND: Much the same as FINGER, except that your typing errors can be traced to a weak hand. After noticing this problem, Mavis will have you concentrate on lessons designed to emphasize keys typed by your weak hand to strengthen it.

MIGRATION: A letter has shifted its position across two or more letters. An example would be if instead of typing "that," you typed "atht."

MIRROR: A "mirror-image" typing error happens when you type a key in the correct row and column but with the wrong hand. That is, you might type a letter in the third row, say E, with the third finger of your left hand. However, what you wanted to type was an I, with the same finger of your right hand. You have, in fact, typed a mirror-image of the letter.

MIS-HIT: This is a random typing error that isn't a transposition, omission ("dropped"), or overlap. You are typing with the correct hands and fingers, but your aim is often off-base. Finger and hand strength, typing position and concentration are often causes of mis-hits.

NUMBER KEY: You aren't typing numbers correctly. Numbers are typed the same way letters are, but usually not as often. Numbers also require you to move further from the "Home Row." If you are having difficulty typing numbers with the same speed and rhythm you already display when typing letters, "Keys and Fingers" can be a good place for you to practice until you bring your numbers up to speed

OVERLAP: You accidentally typed two keys at once when you should have typed only one, usually by failing to hit the correct key squarely. This type of error often occurs when you are rushed and your sitting and hand positions are not correct. Concentrate on short, rhythmic keystrokes.

RECOVERY: The rate at which you recover your typing speed and accuracy (after you realize you've made an error) is too slow. You can deal with typing errors in one of two ways; either backspace and correct the mistake, or temporarily ignore the error and continue to type.

SHIFT KEY: You are typing upper case letters where you should be typing lower case ones, or you are substituting symbols for numbers. The problem is probably with your use of the 'Shift Keys.' It's important to depress the 'Shift Keys' in rhythm with the rest of your key typing.

SPEED (POOR): Your typing speed is not improving as it should, or is actually decreasing. There are several reasons for this condition. Mavis will make specific suggestions for your improvement.

SUBSTITUTION: This error occurs when you type the wrong letter in place of the correct letter. When identified by Mavis, this error type is a random letter error, not specific to a hand or column. (See HAND, WRONG COLUMN, MIRROR.)

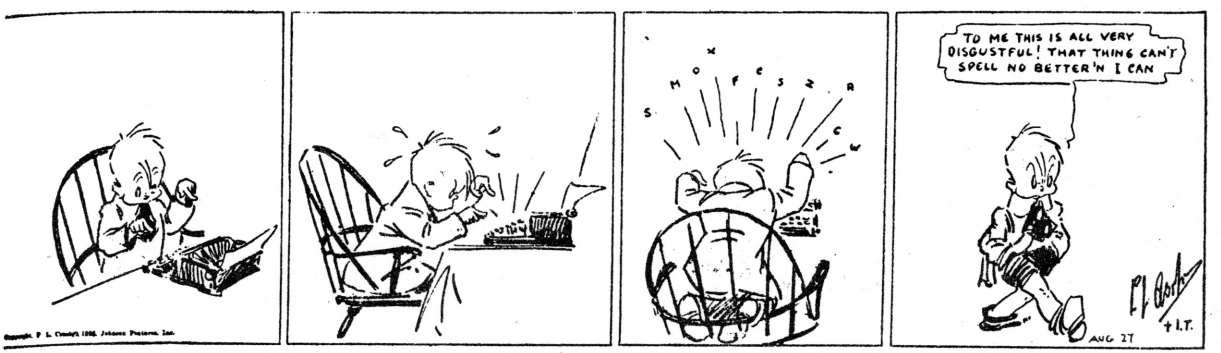
SYMBOL KEY: You are typing symbols incorrectly. (Symbols are keys other than letters and digits.) Many symbols must be typed with the 'Shift Keys' depressed. Others require you to stretch your hand slightly. Mavis will point out the specific problem and suggest the best remedy.

TRANSPOSITION: Occurs when you reverse two consecutive letters in a word, like typing "the" as "hte." Transpositions also occur when you reverse a space position or a punctuation mark preceding or following a word, such as when you type "a nant" instead of "an ant."

WRONG COLUMN: Occurs when you type a letter in the correct row, but in the wrong vertical column. For instance, if you typed an R when you meant to type a T.

WRONG ROW: A "wrong row" error occurs when you are typing with the correct fingers but are basing your typing in the wrong row. A frequent mistake of this type is typing F for R, or vice versa. The cure for this is usually to reposition your hands over the "Home Row."

However, there may be other problems that Mavis will point out, along with their appropriate remedies.



Now that you have a better understanding of the complex methods Mavis uses to tailor her lessons to your individual needs, we hope that you will enjoy the learning process even more, as...Mavis Beacon Teaches *You* Typing!

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